This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

SEVEN DAYS' BOOK.

P138.2

Bound
MAY 1 1899

Harvard College Library

FROM THE BEQUEST OF

JOHN AMORY LOWELL,

(Class of 1815).

This fund is $20,000, and of its income three quarters shall be spent for books and one quarter be added to the principal.

26 Sept. 1898 – 2 Mar. 1899.

THE CHAUTAUQUAN

A MONTHLY MAGAZINE

OCTOBER, 1898, TO MARCH, 1899

Volume XXVIII.—New Series, Volume XIX.

Dr. THEODORE L. FLOOD, Editor

MEADVILLE, PA.
THE T. L. FLOOD PUBLISHING HOUSE

~~TX 160~~
P13x. 2.
1898, Oct. 26 – 1899, Mar. 2,
Linell fund.

Copyrighted by Theodore L. Flood, 1899.

INDEX

TO

THE CHAUTAUQUAN.

VOLUME XXVIII. OCTOBER, 1898, TO MARCH, 1899.

REQUIRED READING:

Bailey, The Old (Illustrated) ..... *John Charles Thornley* 323
Bright, John ..... *Prof. Carl Evans Boyd, Ph.D.* 541
Canning Industry in the United States, The .... *Edward S. Judge* 126
Cathedrals of England, The (Illustrated), I., II .. *S. Parkes Cadman, D.D.* 3, 115
Chemical Science, The Growth of ..... *Prof. L. H. Batchelder, A.M.* 25
Chemistry of To-day, The ..... *Prof. L. H. Batchelder, A.M.* 139
Chemistry as a Factor in Modern Civilization ... *Prof. L. H. Batchelder, A.M.* 444
Colonization, English, in the Western World .... *Eugene Parsons* 29
Colonization, English, in the Old World ..... *Eugene Parsons* 143
Derby, Lord ..... *T. Raleigh, D.C.L.* 440
Electrical Manufacturing Interests ..... *Thomas Commerford Martin* 13
England, The Cathedrals of (Illustrated), I., II .. *S. Parkes Cadman, D.D.* 3, 115
England, Factory Life and Legislation in ..... *A. M. Anderson* 243
English Colonization in the Western World ..... *Eugene Parsons* 29
English Colonization in the Old World ..... *Eugene Parsons* 143
English Journalism ..... *Mary H. Krout* 345
English Politics, The Liquor Interests in ..... *Edward Porritt* 554
English Poor Law and English Charities ..... *C. H. d' E. Leppington* 452
Englishmen, The Education of (Illustrated) ..... *Mary A. De Morgan* 427
Experience, The Testimony of Human ..... *Rev. David Gregg, D.D* 449
God is a Spirit ..... *Alexander McKenzie* 23
God, The Human Life of ..... *Henry Van Dyke, D.D., LL.D* 235
Hotel, The American ..... *E. J. Edwards* 330
Liquor Interests in English Politics, The ..... *Edward Porritt* 554
London, The Immensity of (Illustrated) ..... *John Gennings* 219
Lumber, American ..... *B. E. Fernow, LL.D.* 436
Manchester, The City of (Illustrated) ..... *E. A. Davies* 531
Melbourne, Lord ..... *T. Raleigh, D.C.L.* 333
Opening the Door ..... *Francis G. Peabody* 21
Organized Matter, The Central Element of, I., II ..... *Prof. L. H. Batchelder, A.M.* 239, 341
Palmerston, Lord ..... *J. Castell Hopkins* 130
Peel, Sir Robert ..... *Prof. H. Morse Stephens, M.A* 231
Physical Science, Recent Progress in ..... *Prof. L. H. Batchelder, A.M.* 550
Pitt, William ..... *Prof. John W. Perrin, Ph.D.* 17
Saving the Life ..... *Jennie Fowler Willing* 337
Telegraphs and Telephones ..... *Charles Barnard* 227
Textile Industries of the United States, The .... *Henry G. Kittredge* 538
True Motive in the Christian Life, The ..... *Ezra Hoyt Byington, D.D* 545
True Greatness ..... *Alexander Maclaren, D.D* 135

GENERAL READING:

Alimentation, The Physiology of....*A. Dastre*....460
Atmosphere, The Constituents of the....*A. Dastre*....180
Austria, The Emperor of....*Sydney Brooks*....153
Barrys, The. A Story. Chapters I.–XV....*Shan Bullock*....169, 261, 372, 483, 577
Bismarck, Prince....*Felix L. Oswald*.... 65
Cocaine and Its Use in Surgery....*A. Dastre*....604
Colonial Possessions, Our (Illustrated)....*Cyrus C. Adams*.... 33
Cyrano de Bergerac, the Man....*G. P. Mancini*....595
Dreyfus Affair and French Public Opinion, The.*H. R. Chamberlain*....600
Education of Boys in Italy, The....*Margerita Traube Mengarini*....257
France, The Present Condition of....*Bishop H. W. Warren, LL.D.*....280
Glass, A House of....*Jules Henrivaux*....389
Hirschgasse in Heidelberg, The....*Erich Kleinschmidt*....478
Invention, Effect of, Upon Labor and Morals...*Edward C. Williams*....559
Irritability and Movement....*Wilhelm Haacke*....276
Kitchen, Evolution in the....*Frances Albert Doughty*....386
Klondike Gold Fever, The....*D. Zahn*....151
Liquefied Gases and Air in the Industries....*Ernesto Mancini*....500
McKinley, President, and the War....*William Eleroy Curtis*.... 49
Mill Operatives in the South....*Day Allen Willey*....458
Misogamy and Its Causes....*Richard Mulckow*....565
Mistake of His Life, The. An Anglo-American Romance. Conclusion....*Elsey Hay*.... 41
New Zealand and Its Resources (Illustrated) ...*Mary H. Krout*.... 57
Nicaragua Canal, The....*Day Allen Willey*....147
Parker, Dr. Joseph (Illustrated)....*William Eleroy Curtis*....393
Philippines, The Campaign in the....*William Gilbert Irwin*....158
Psychology of War, The....*C. Fabris*.... 69
Railway of Boston, The Underground (Illustrated).*Jane A. Stewart*....568
Science, Some American Women in (Illustrated) I., II., III....*Mrs. M. Burton Williamson*....161, 361, 465
Social Passion in Modern English Novelists, The.*Prof. Vida Dutton Scudder, M.A*.... 74
Socialist Propaganda in Germany, The....*Edgar Milhaud*....284
Stars, Shooting....*O. F. Bianco*....351
Submerged Ships and Their Salvage....*Fred Hood*.... 54
Traffic, Revolution in....*Adolph Schulze*....368
United States and Her New Possessions, The..*John W. Hardwick*....473
War, The Psychology of....*C. Fabris*.... 69
War, Woman's Work in the (Illustrated)....*Etta Ramsdell Goodwin*....249
Women in Science, Some American (Illustrated) I., II., III....*Mrs. M. Burton Williamson*....161, 361, 465
Women in France and the Colonies, "Unclassed".*Count d'Haussonville*.... 76
Yukon Country, The....*Bishop P. T. Rowe*....355

POETRY:

Snow-storm, The....*Clinton Scollard*....350
Spell of the Sea, The....*Helen G. Hawthorne*....482

HISTORY AS IT IS MADE:

Anarchy and Assassination....191
Army Beef Scandal, The....612
Blacks, Whites vs....292
Canada, Neighbor....189
Canadian-American Commission, A.... 85
China, Turmoil in....190
China, Japan, and the United States....510
Church Movements....294
Church-Land, In....402

Church Activity....511
Church Interests....616
Colonial Administration....610
Columbus' Ashes....186
Congress, Legislation in....614
Country, A Record-making....512
Court Decisions, Important....295
Czar as a World Peacemaker, The....85
Davis, Winnie....187
Deaths....192, 296, 404, 512, 616
Death and Destruction....192
Dewey First and Last....81
Diplomatic Changes....613
Dingley, Nelson....616
Domestic Concerns....511
Dreyfus Again....87
Dreyfus Case Revision....292
Eagan, Court-martial of General....611
Elections, November....289
Elections in 1898....187
Election Aftermath....399
Elections, Senatorial....614
Fashoda....293
Father of the Senate, The....508
Filipinos, A Battle with....609
Foreign Events, Other....404, 615
Foreign Friction....510
French Crisis, The....190
France, Justice in....403
Great Britain and France, In....615
India, Viceroy of....88
Indian Outbreak, An....291
Japan, China, and the United States....510
Khartoum Retaken....86
Labor Conflict in Illinois....291
Louise of Denmark, Queen....191
Maria Teresa, The....186
McKinley's Southern Trip....507
Mexican Embassy, The....509
Mormon Church, The....188
Netherlands, Queen of the....87
New Possessions, Governing....505
Peace Commissions....82
Peace Commission at Work, The....289
Peace, A Treaty of....397
Peace Treaty, Ratification of the....609
Peace Treaty and Expansion Policy....505
Political Figures, New....290
President's Message, The....397
Puerto Rico, Conquest of....82
Race Riots and Revolution....400
Republic for a Month, A....403
Samoa, In....88
Samoan Complications....613
Santiago Campaign, Aftermath of the....83
Secretary of State, A New....83
Secretary of the Interior, A New....509
Senatorial Elections....614

Utah, The Congressman from 399
War with Spain, Formal End of 81
War, After the 508
War, Casualties of the 186
War Inquiry Commission 185
Waring, Col. George E 296
W. C. T. U. Convention 401
Whites vs. Blacks 292
William's Pilgrimage, Emperor 294

C. L. S. C. WORK:

Assemblies, The Summer, for 1898 ..... 104, 211, 310
Classes, The C. L. S. C 97, 202, 305, 412, 521, 624
Classes, Graduate 98, 203, 307, 522, 413
Class of 1899 ..... 97, 202, 305, 412, 521, 624
Class of 1900 ..... 97, 202, 306, 413, 522, 625
Class of 1901 ..... 97, 202, 306, 413, 522, 625
Class of 1902 ..... 97, 203, 306, 413, 522, 625
Local Circles 101, 204, 308, 414, 523, 626
Outline and Programs, C. L. S. C 89, 193, 297, 405, 513, 617
Syllabus of C. L. S. C. Reading 90, 194. 298, 406, 514, 618

TALK ABOUT BOOKS 110, 214, 311, 420, 526, 629

Books Received 112, 216, 424, 528, 632

"THE BARRYS," A brilliant story of Irish life and character, by Shan Bullock, the greatest Irish novelist of the day, begins in the November Number.

VOL. XXVIII. OCTOBER, 1898. No. 1.

THE CHAUTAUQUAN

SEP 26 1898
CAMBRIDGE, MASS.

DR. THEODORE L. FLOOD, Editor and Proprietor, Meadville, Penn'a.

NEW YORK, Bible House.
LONDON, Kegan Paul, Trench, Trubner & Co., L't'd, Paternoster House, Charing Cross Road, W. C
DUNDEE, SCOTLAND, Rev. Donald Cook, 5 Albany Terrace.

VOL. XXVIII. OCTOBER, 1898. NO. 1.

THE CHAUTAUQUAN

A MONTHLY MAGAZINE.

.....CONTENTS.....

Prince Otto von Bismarck.....*Frontispiece*
Colonel John Hay, the New Secretary of State.....*Frontispiece*

REQUIRED READING.

The Cathedrals of England. I. Illustrated.....*S. Parkes Cadman, D. D.* 3
Electrical Manufacturing Interests.....*Thomas Commerford Martin.* 13
William Pitt.....*Prof. John W. Perrin, Ph.D.* 17
Opening the Door..... 21
God is a Spirit..... 23
The Growth of Chemical Science.....*Prof. L. H. Batchelder, A.M.* 25
English Colonization in the Western World.....*Eugene Parsons.* 29

GENERAL READING.

Our Colonial Possessions. Illustrated.....*Cyrus C. Adams.* 33
The Mistake of His Life. An Anglo-American Romance. Conclusion.....*Elsey Hay.* 41
President McKinley and the War.....*William Eleroy Curtis.* 49
Submerged Ships and Their Salvage.....*Fred Hood.* 54
New Zealand and its Resources. Illustrated.....*Mary H. Krout.* 57
Prince Bismarck.....*Felix L. Oswald.* 65
The Psychology of War.....*C. Fabris.* 69
The Social Passion in Modern English Novelists.....*Prof. Vida Dutton Scudder, M. A.* 74
"Unclassed" Women in France and the Colonies.....*Count d' Haussonville.* 76

HISTORY AS IT IS MADE.

Formal End of War With Spain; Dewey First and Last; Conquest of Puerto Rico; Peace Commissions; A New Secretary of State; Aftermath of the Santiago Campaign; The Czar as a World Peacemaker; A Canadian-American Commission; Khartoum Retaken; Dreyfus Again; Queen of the Netherlands; Viceroy of India; In Samoa. Illustrated..... 81

C. L. S. C. WORK.

C. L. S. C. Outline and Programs..... 89
Syllabus of C. L. S. C. Reading..... 90
The C. L. S. C. Classes..... 97
Local Circles..... 101
The Summer Assemblies for 1898..... 104
The Chautauqua Literary and Scientific Circle..... 114
The C. L. S. C. Books for 1898–99..... 116
The C. L. S. C. Class of 1902..... 118
The Chautauqua Correspondence College..... 120
Letters from Members of Chautauqua College..... 122

Talk About Books..... 110

DR. THEODORE L. FLOOD, Editor and Proprietor, Meadville, Pa.

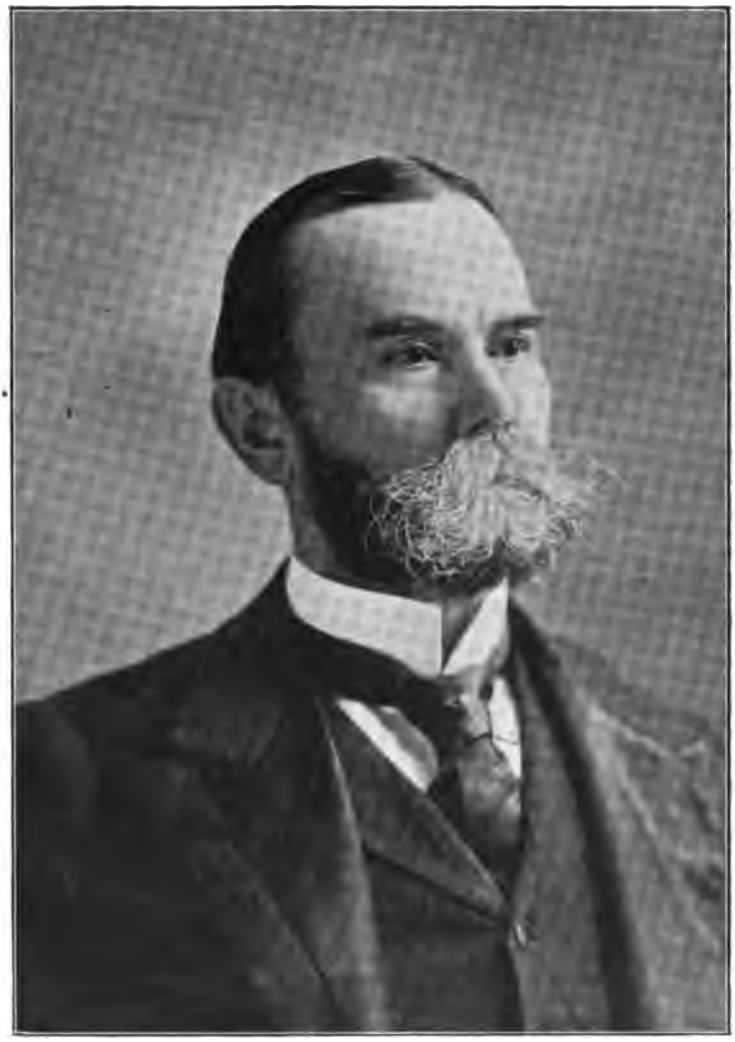
NEW YORK, Bible House.
LONDON, Kegan Paul, Trench, Trübner & Co., L't'd, Paternoster House, Charing Cross Road, W. C.
DUNDEE, SCOTLAND, Rev. Donald Cook, 6 Albany Terrace.

Entered According to Act of Congress, October, 1898, by THEODORE L. FLOOD, in the office of the Librarian of Congress, Washington, D. C.

Yearly Subscription, $2.00.

PRINCE OTTO VON BISMARCK.

See page 65.



COLONEL JOHN HAY, THE NEW SECRETARY OF STATE.

See "History As It Is Made."

THE CHAUTAUQUAN.

VOL. XXVIII. OCTOBER, 1898. No. 1.

OFFICERS OF THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

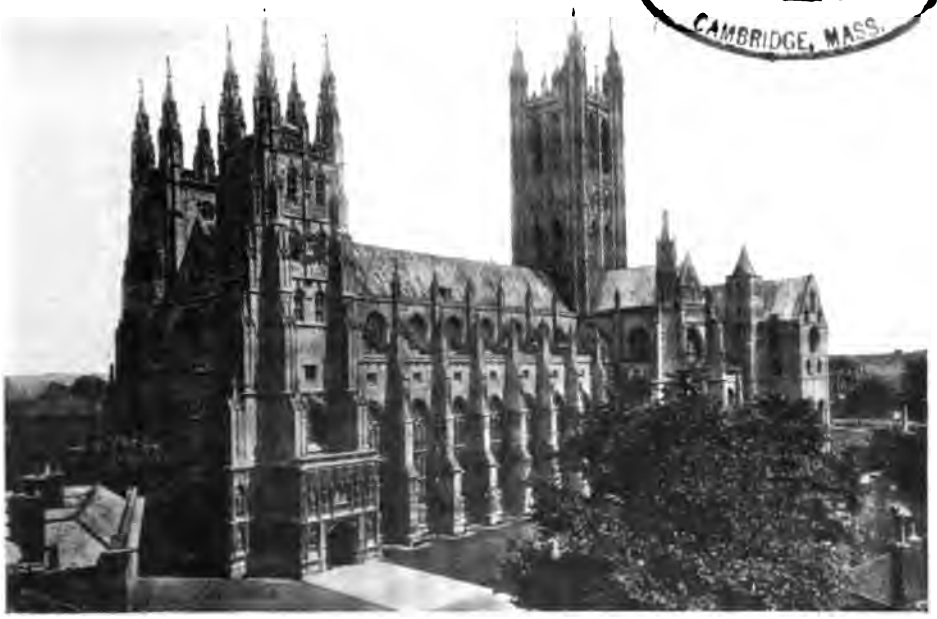
JOHN H. VINCENT, *Chancellor*, 89 West Genesee Street, Buffalo, N. Y. All "personal" letters should be so marked on envelope. LEWIS MILLER, *President*. JESSE L. HURLBUT, *Principal*. *Counselors:* LYMAN ABBOTT, D. D.; BISHOP H. W. WARREN, D. D.; J. M. GIBSON, D. D.; W. C. WILKINSON, D. D.: EDWARD EVERETT HALE, D. D.; JAMES H. CARLISLE, LL. D. MISS K. F. KIMBALL, *Executive Secretary*. A. M. MARTIN, *General Secretary*.

REQUIRED READING FOR THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

...RD COLLEGE LIB...
SEP 26 1898
CAMBRIDGE, MASS.

THE CATHEDRALS OF ENGLAND.*

BY S. PARKES CADMAN, D. D.



CANTERBURY CATHEDRAL, FROM THE SOUTHWEST.

THE study of the principal cathedral churches of the countries of Europe is the unfolding of the best and highest life of these lands. A careful walk through the aisles of Caen, Durham, Winchester, Westminster, or Canterbury teaches one more concerning the age they represent than does the reading of many books. Their massive towers and fretted vaults and pillared spaces, within which richly colored windows bejewel the sacred gloom, are overcast by the still higher light of humanity. For a cathedral is really man's deepest and most passionate devotion offered in architecture; it is a great petrified prayer, its spires and pinnacles seeming continually to challenge the mercy of heaven in uplifted supplication. In those days when the

*The Notes on the Required Reading in THE CHAUTAUQUAN will be found following those on the books of the course, in the C. L. S. C. Department of the magazine.

CHOIR OF CANTERBURY CATHEDRAL.

making of books was scanty and clerkly learning rare, when controversy was choked by the powerful grip of ecclesiastical uniformity and scholastic logic, these master builders of the minster churches poured out upon the sacred fanes the full complement of their loving toil.

During the feudal period church and state were in closest intimacy. So through these buildings sacred and secular history often flow together. One cannot think of Westminster without remembering the bravery of earth, its pomp and power, as well as the gateway of heaven. The same is true of Winchester's noble Norman church, where kings and queens rustled down the aisles in all the finery of wedding garments, and stark William the Conqueror held his high councils of state.

The differing tastes of men, their habits of thought, especially in relation to art and science, are here powerfully illustrated, and because of these things every cathedral in England has a distinct individuality which reveals itself on acquaintance. Sympathy, appreciation, and even personal affection, will be awakened in the heart of the student by such intercourse. It is well known that Lord Macaulay spent every Eastertide for many years in visiting these various structures, and John Richard Green has well said that the whole story of the English conquest stands written in the stately vault of the minster at Caen, which still covers the tomb of the Conqueror. Ely, majestic in its solitary grandeur above the fenlands, recalls the turning-point of history, when Hereward, the last of the Englishmen, refused to surrender. Canterbury brings back the memory of crafty Henry II. and his turbulent priest, Thomas à Becket. Durham reminds one of its lordly prince-bishops, who ruled the region of the North. And underneath these fabrics, sometimes forming their foundation and part of their superstructure, are the rude remains of the humbler churches of Alfred and Dunstan.

Regarded from these standpoints cathedrals are not merely monuments, they are poems—poems whose story unfolds through the ages, canto by canto, breathing life and progress, and whose characters are striving and suffering and toiling human hearts. Enough has been said to indicate the worth of a careful survey such as we now propose to the reader. Miss Margaretta Byrd has

WINCHESTER CATHEDRAL.

said that the choicest way to take that survey "is that in which the historical interest blends with the religious and esthetic, and these with a passion for the race which finds its satisfaction in buildings made by men of that race."

Canterbury naturally comes first in the order of importance and churchly seniority, for it has within it the throne of Augustine. It was begun by Lanfranc (1070–89), and four hundred years later the great central tower's erection marked the completion of the edifice. The kings of England and Scotland, as well as all the English bishops, assisted at its dedication. In the choir of this church the monks of the adjacent abbey watched over the body of Becket during the night after his murder, and in this place may still be seen the mosaic pavement, similar to that around the tomb of Edward the Confessor in Westminster Abbey, which marks the exact spot on which stood the

NAVE OF WINCHESTER CATHEDRAL.

DURHAM CATHEDRAL.

shrine of the martyred archbishop. The mosaic contains signs of the zodiac and emblems of the virtues and vices. On each side of the site is a deep mark worn in the soft, pinkish marble by the knees of generations of pilgrims who prostrated themselves here while the treasures were displayed to their gaze. The translation of Becket's remains from the tomb to his shrine took place in 1220 A. D., fifty years after his death. The young king, Henry III., who had just laid the foundation of the new abbey at Westminster, assisted at the ceremony. The primate was none other than Stephen Langton, renowned both as a scholar and as a statesman. He had just carried out the division of the Bible into chapters as it is now arranged and had previously won a decisive victory for English liberty by forcing King John to sign the Great Charter.

It is easy to imagine how the devotees of the Middle Ages must have been thrilled at the sight of this hallowed tomb, and all the wealth of gold and blaze of jewels which the piety of that day heaped upon it. Chief among them was the huge carbuncle, as large as an egg, given by Louis VII. of France. The yearly offerings so late as the sixteenth century were worth twenty thousand dollars. The fame of the martyr spread through the whole of Christendom, and everybody was laid under willing contribution. At the dissolution of the monasteries in 1538 a writ of summons was issued in the name of Henry VIII. against Thomas à Becket, sometime archbishop of Canterbury, accusing him of treason, contumacy, and rebellion. This document was solemnly read before the tomb, and as Thomas did not respond the suit was tried at Westminster, when the defendant again failed to put in an appearance. However, the king was determined he should have justice, so he named an advocate to represent him. Sad to relate, judgment was given in favor of the crown, and the bones before which millions had prostrated themselves, including Emperor Charles V., Edward I., and Richard the Lion-heart, were condemned to be exhumed and burnt. The shrine was destroyed, and the gold and jewels removed from it filled twenty-six carts. I need scarcely add that Henry appropriated the whole treasure.

But though Henry destroyed the tomb, he could not root out the fame of the man. There is no country in Europe which does not exhibit traces of Becket. A tooth of his is preserved at Verona, part of an arm

at Florence, and another part at Mons; Lisbon possesses one of his limbs; Bourbourg his chalice; Douay his hair shirt; St. Omer his miter; Sens his vestments, and in England every county contained a church or convent dedicated to his name.

Such was Canterbury Cathedral in the Middle Ages, the resort of Europe and of every class of folk. The stories of these progresses have been presented by Chaucer's "Canterbury Tales." There we find the knight, the yeoman, the monk, the friar, the Oxford scholar, the miller, the poet, the lawyer, and the cook, riding down to the premier church in a kind of motley caravan.

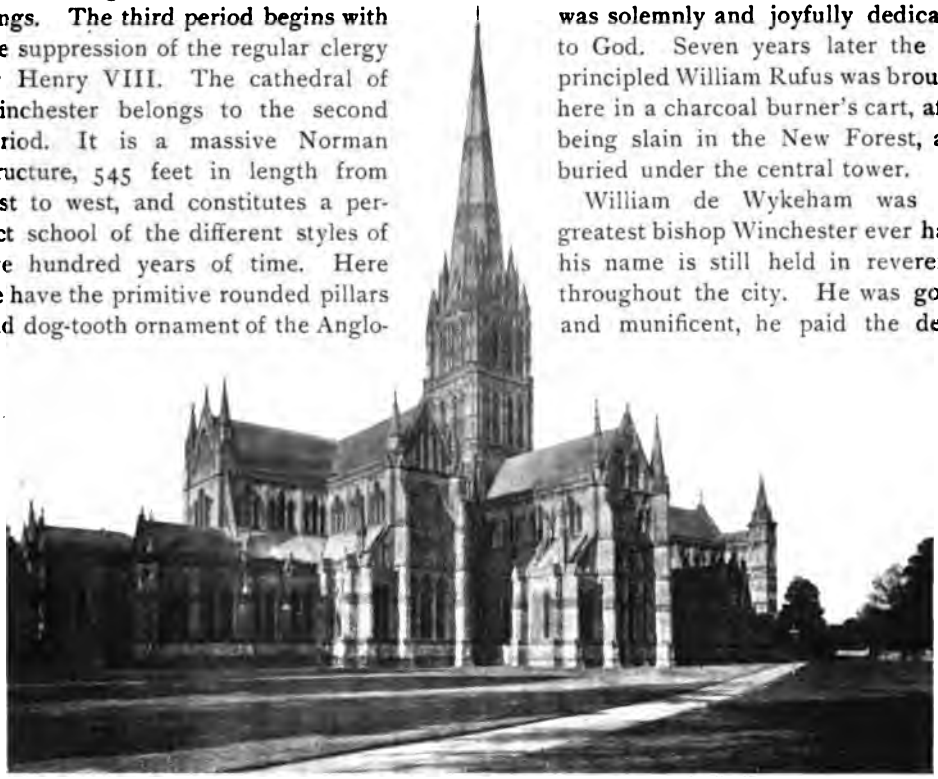
The external beauties of Canterbury can best be seen from a distance. The old town nestles under its walls, and beyond is a ring of hills encircling the city, from which you look down the rich, peaceful valley of the Stour, where cattle stand knee-deep in clover, and see the mighty church towering over the red-tiled roofs of the houses, the mother building of English-speaking men's religious life.

The cathedral is constructed in the form of a cross, 540 feet long by 156 feet in breadth. There are several enriched entrances of various dates, distinguished for beauty and plenitude of ornament. The western front is the work of Friar Chillenden, a skilful architect of the reign of Richard II. The nave consists of a series of clustered columns on each side, from which rise the light and graceful arches peculiar to the Pointed style. Trinity Chapel, situated to the east of the choir, contains the most authentic memorial now remaining of the first of a long line of English heroes —the tomb of the Black Prince. So dearly was he loved that he was allowed a resting-place in the most sacred spot of that time. His effigy is of brass, and one can trace the resemblance in the features with the effigy of his father and his grandfather, the one in Westminster Abbey, the latter in Gloucester Cathedral.

We turn next to Winchester, which, with Durham, offers more interesting features architecturally than does Canterbury. These churches are justly held the most important examples of Norman building in England. There are three periods in English church history which should be taken up in connection with the study of English cathedrals. The first dates with the coming of Augustine and his monks to the south, and

CHOIR OF DURHAM CATHEDRAL.

of the missionaries of Iona to the north, of England. The second period, and by far the most important, we are now about to illustrate; that of the Norman Conquest and the reigns of the four Norman kings. The third period begins with the suppression of the regular clergy by Henry VIII. The cathedral of Winchester belongs to the second period. It is a massive Norman structure, 545 feet in length from east to west, and constitutes a perfect school of the different styles of five hundred years of time. Here we have the primitive rounded pillars and dog-tooth ornament of the Anglo-Norman. These form the shell of the church, and laid upon them, by the triumphant skill of Bishop de Wykeham, is the symmetrical grace and airiness for which the Perpendicular style is so celebrated.



SALISBURY CATHEDRAL, FROM THE NORTHEAST.

A minute description of the history of this see, or of the earlier buildings of Saxon monasticism, is impossible. Legend tells that in the year of grace 169 a church stood here, in which the monks devoutly sang the praises of God for 102 years. Following that was a Saxon foundation called after St. Hilda. The present building was erected by the first Norman bishop, who was installed on Whit-Sunday, 1070. Nine years later he undertook the work but was compelled to cease operations for lack of timber; whereupon the king granted him as much as he could cut and carry from an adjacent wood in three days. The prelate stripped every tree from the forest, and in 1093, at the feast of the patron saint Swithin, the church was solemnly and joyfully dedicated to God. Seven years later the unprincipled William Rufus was brought here in a charcoal burner's cart, after being slain in the New Forest, and buried under the central tower.

William de Wykeham was the greatest bishop Winchester ever had; his name is still held in reverence throughout the city. He was godly and munificent, he paid the debts of prisoners, repaired the convents and churches of his diocese, and founded the famous grammar school of the town. As you walk within and without these cloistered retreats you may observe the solid and massive strength of the transepts, the unrivaled length of the nave, redeemed from heaviness by the later additions of early English, the oaken stalls of the choir, superbly carved and black as ebony, and the screens of the presbytery erected in 1525 by Bishop Fox, upon which are six mortuary chests, containing the remains of Saxon kings who have been buried in this church.

Durham's magnificent pile is situated on a rocky eminence, rearing its front against the river Weir. The galilee chapel projects to the very edge of the precipice, its

WEST FRONT OF SALISBURY CATHEDRAL.

huge buttresses supporting the ponderous body of the main building, while immediately above it is the enriched western window of the Pointed form, rising nearly to the height of the roof, the façade being completed by the two square Norman towers.

The original design prevails throughout the building, although many Pointed windows have been inserted from time to time. Entering the chapel, dedicated to the Virgin Mary, and known as the galilee, one follows instructively the path to the tomb of the Venerable Bede, saint and schoolman, whose relics were stolen from Jarrow and deposited here in 1022. This chapel was the only part of the cathedral in which women were formerly allowed to attend divine service. Coming to the nave and choir, you have before you the stately work of the bishops Carilepho and Flambard, practically unaltered and the most perfect example of Norman architecture in the world.

Joseph Butler, author of the "Analogy," Cuthbert Tunstall, the friend of Erasmus, Cardinal Wolsey, the minister of Henry VIII., John Barber Lightfoot, the first scholar of the Anglican Church, in this century, and the present "episcopos," Brooke Foss Westcott, who has given us the best text of the Greek Testament—these are among the honored names of the long roll of the prince-palatine bishops of Durham who have governed it for twelve hundred years.

It is the first historical and religious center of Northern England, ramped against the sky to proclaim God and the Christian faith to the turbulent hordes of the borderland. And though its bishop no longer has the political prestige of former years Durham is still considered one of the cardinal honors of the Anglican episcopacy.

Salisbury is unique for two reasons: First, it has the clearest record of its history. In almost every other church there are but vague legendary accounts of the original foundation, but here the antiquarian may find a trustworthy chronicle of its first inception and each successive stage of its progress. Second, it is the most notable specimen of early English extant and also the first important building carried out in that style. The chief reason for its extraordinary purity and harmony is that it was begun and finished within forty years (1220-60). The spire is 406 feet in height and is the loftiest in England. The cost of the building was equivalent to $2,500,000 in the money of our day. And Henry III. is supposed to have been so enthusiastic in his admiration of Bishop Poore's new church that he at once revolutionized the plans for Westminster Abbey and completed the London church after this example. It has been called "the Parthenon of Gothic architecture." Pugin declared he had seen nothing like it in Europe, and perhaps Amiens in France is its only serious rival.

Passing from the Norman churches we have previously mentioned one sees here the strength of that more enlightened and humane system which overcame the earlier models. Situated on a broad lawn of greensward, with its delicately tinted Portland stone a contrast to earth and sky, and raising up "the silent finger" of its octagonal spire, it literally points to heaven and leads the way. You stand and gaze upon it enthralled, a vassal to your delight. Criticism is well-nigh impossible; its only fault is the severity of its faultlessness.

Here are groups of tall, narrow windows without tracery, acute arches, slender clustered pillars, foliated capitals, deeper buttresses, and high steep roofs: the leading traits of the English designers who displaced the Norman and the Romanesque. And one may add, in passing, that church builders of to-day can find no better model for a religious house than Salisbury Cathedral. It is exactly 641 years old, and it was carefully restored under Sir George Gilbert Scott's direction in 1862–64.

There are two long rows of monuments to warriors and prelates. In the choir Earl Beauchamp's superb reredos commands attention; the lady-chapel at the eastern extremity (and placed in all such churches to indicate the position of the mother of Christ weeping at the cross) has within it the tomb of St. Osmond and also of

> The glory of all verse,
> Sidney's sister, Pembroke's mother.

In the muniment room is one of the original copies of the Magna Charta, deposited here for safety in the care of William Longespeé, who witnessed the signing of that document.

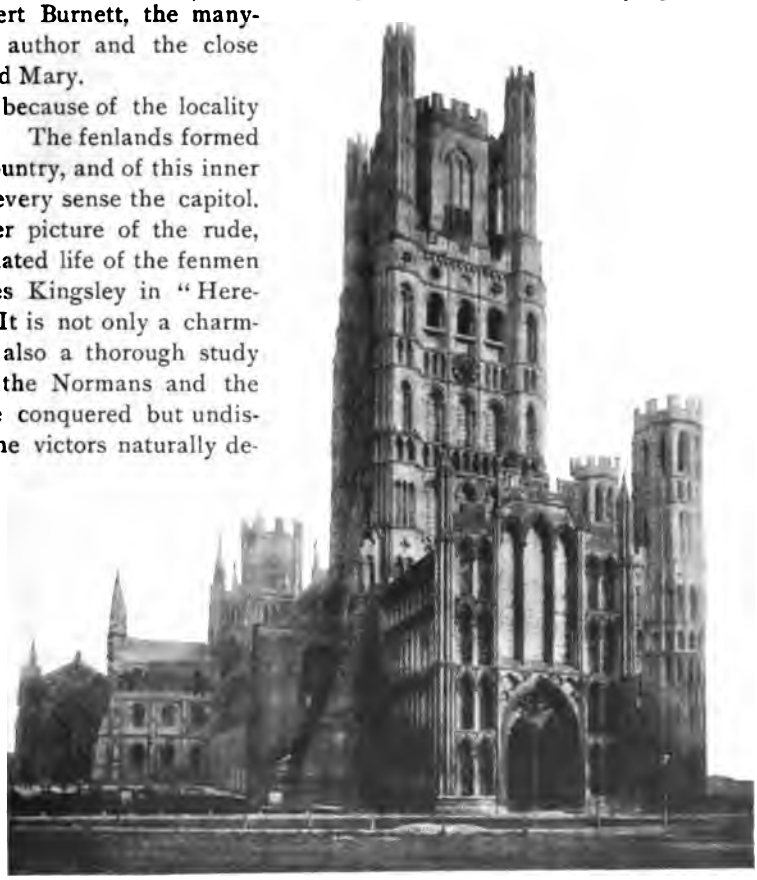
The history of Salisbury diocese began in the reign of King Ina, about 705. In 1076 the cathedral church was transferred to old Sarum. Thence in 1220 it was removed to Salisbury by Bishop William Poore. Among other famous bishops are Jocelin de Bailleul, co-framer of the Constitutions of Clarendon, Robert Hallam, leader of the English Church in the Council of Constance (1415–17), Richard Beauchamp, a notable builder and chancellor of the Order of the Garter, Cardinal Campeggio, who was deprived of the see by act of Parliament, John Jewel, author of the famous "Apology of the Church of England" and the patron of the "judicious Richard Hooker," and Gilbert Burnett, the many-sided polemic and author and the close friend of William and Mary.

Ely is interesting because of the locality in which it is placed. The fenlands formed a country within a country, and of this inner country Ely was in every sense the capitol.

There is no better picture of the rude, passionate, and insulated life of the fenmen than that of Charles Kingsley in "Hereward the Wake." It is not only a charming romance, it is also a thorough study of the incoming of the Normans and the dispossession of the conquered but undismayed Saxons. The victors naturally despised the buildings of the natives. Saxon bishops were replaced by Norman prelates, and the newly consecrated overseers, relieved of the dread that Christ would return at the end of a thousand years, began with the new cycle to cover over the land with baronial establishments and churches. The latter they built as those

> Who hoped these stones should see the day
> When Christ should come; and that these walls
> Might stand o'er them till judgment calls.

Lanfranc at Canterbury, Gundulf at London and Rochester, Losinga at Norwich, Walkolin at Worcester, and Thomas at York, were the leaders of the guild of bishop builders. But Ely, true to the country of the last of the Englishmen, has reserved to itself more peculiarities than any other edifice of the kind. First you may notice the great western tower with its south wing, no other specimen of which appears in England. Another striking feature is the octagon with the lantern, and yet another is the unusual dimensions of the lady-chapel. The blind bishop Geoffrey Ridel designed the great west front, which, had it suffered no dilapidation from the decaying hand of



ELY CATHEDRAL, FROM THE NORTHWEST.

time, would have been unexcelled in beauty or impressive magnificence. Here, as at Durham, is a galilee chapel, formerly used for the reception of penitents, and named from the fact that Galilee was furthest from Jerusalem, the holy city. So these chapels are found at the western end of the church, furthest from the holy place in the eastern sanctuary.

NAVE OF ELY CATHEDRAL.

The view gained under the great western tower travels along the lofty nave, opening into the octagon, then rests upon the rich perforated screen dividing the nave from the choir, and through this one catches a distant glimpse of the exquisite altar in the holy place, the whole prospect provoking deep feeling and devotion. Built of Barnack free-stone and regally decorated with Purbeck marble, its oaken roof ceiled in and covered with splendid frescoes, Ely, thanks to the last restoration, conducted by Sir George Gilbert Scott, deserves its place among the five leading cathedrals of England. Attention settles most forcibly upon the octagon, the most original design in the whole range of Gothic architecture. Details I cannot dwell upon, they are so many and yet so important. The historic stained glass, the sculptured story of St. Etheldreda, the Saxon foundress of the monastery, the statues of apostles, the richly carved pulpit of Caen stone, and the exquisite presbytery—these must be seen beneath the guidance of such a verger as conducted me within the precincts if they are to be properly appreciated.

Fenland was the home of Oliver Cromwell, and on one occasion when attending divine service here he commanded the bishop to leave out the ritual. "Quit your fooling," cried the stern Puritan captain, "and come down, sir." Richard Cox, another bishop, and an ardent reformer, incurred the wrath of Queen Elizabeth because he resisted her spoliation of the see. "Proud prelate," said she, "I made you and I will unfrock you if you do not as I command."

ELECTRICAL MANUFACTURING INTERESTS.

BY THOMAS COMMERFORD MARTIN.

FEW industrial events have excited greater interest of late than the heavy purchases of American apparatus for the operation of the new underground electrical roads in London, accompanied by other large purchases for trolley roads in different parts of the United Kingdom. While we, in this country, have viewed the occurrence with complacency, in England it has been discussed with deep concern. A leading English statesman has said of his countrymen that they are very easily thrown into a state of alarm. It is true; and the truth is in itself a serious compliment to the genius of that people, who, in their foreign politics and in their trade not less than within their trim little island, are so sedulous in keeping all the fences in good repair. Thus the inroad of electrical railroad apparatus "made in America" provoked again the state of panic with which an Englishman greets some new phenomenon until, getting his second wind and repossessing his unrivaled common sense, he prepares to combat and to overcome, no matter what the opponent's strength may be. The subject was brought up in the Houses of Parliament, discussed in the press, and furnished an endless topic of conversation, with the result that should England, as likely, begin an era of electric railway construction, the materials used will assuredly be largely of her own production, based, however, upon American models and ideas.

This episode does not stand alone by any means as an indication of the supremacy of American electrical manufactures. It is matched by many others; such as the sale of five hundred street-car equipments by the Paris agency of a Cleveland company, to be distributed throughout France, Italy, and Germany; the adoption of American apparatus in Egypt, Mexico, and Brazil; the export of wire and motors to Japan; the equipment of mining plants in South Africa. There has not been a month of late in which I have not been visited or written to by enterprising engineers or merchants from abroad, who ask me to put them in the way of taking up some novelty or specialty, the control of which for the foreign market is still open. This country has been raked as with a fine-tooth comb by persons who would thus reap some of the fruits of the enormous sales which they see ahead for American electrical apparatus of every kind and grade.

Emerson once said that steam is half an Englishman. Electricity is half a Yankee. You can penetrate hardly any part of the world without finding some of England's machinery. You can go hardly anywhere without encountering some one or another of the electrical devices for which America has already become famous. Admitting that the great European countries are likely in due time to meet their own electrical wants, on the large scale, there can be no doubt that they are now drawing supplies from us in considerable quantities, and no question as to the fact that the outside markets entered by the "open doors" are rapidly becoming ours. Moreover, in this country we have a population which by its ready acceptance of new electrical inventions has made it possible to manufacture in a wholesale manner with all the consequent reduction in price and universal availability of articles which only a few years ago were absolutely non-existent. Electrically considered, London, Paris, and Berlin are the backwoods, while such cities as Seattle, Detroit, and St. Louis stand at the true center of a high civilization. There is a more general use of electricity in New York City than in all of Spain put together.

Many reasons have contributed to the preeminence of electrical America. The vastness of our territory early gave a rapid

development to the telegraph. It was necessary to the political cohesion of the country, but commerce required it more. That the telephone should enjoy the warmest welcome in the land of its birth was only natural, but we have more than maintained our lead. Mr. Henry Norman, giving his observations of a recent visit to the United States, noted that the desk telephone was in use wherever he went. On the other side of the Atlantic, he comments, you would as soon look for liquid air as part of the office furniture. To us it is a self-evident fact that even at five cents a message, sent instantly all over the city, the telephone is cheaper than hiring office boys or depending upon a messenger system.

Turning to the use of the electric motor, the electric railway, and the electric light, it will be seen that each of these has been encouraged by the special conditions of life in America, while the brilliant achievements of a host of inventors have made these arts emphatically ours at each stage of real advance. The germinal ideas have floated about the world; the crude experiments and their pathetic failure belong to no country in particular; but somehow the glory of "getting there" falls to America, even though, as often happens, the successful man was born on the other side of the water. In fact, it is one of the phenomena of our electrical development that so many nationalities have contributed to it. Edison is half a Canadian; Professor Bell, of the telephone, is a Scotchman; Tesla is an Austro-Slav; Edward Weston and Prof. Elihu Thomson were born in England. In the electric railway field, Leo Daft is of English birth, and that indomitable pioneer, the late C. J. Van Depoele, was a Belgian. Yet with all these geniuses, as with the army of naturalized artisans who have enlisted under their industrial banners, the American enthusiasm, knack, and swift way of arriving at a clean, concrete result, have given the world blessings and comforts that would probably still have lingered unknown if these men had not planted their feet in the stimulating soil of the United States. There is something psychic in this greater ability to achieve and accomplish after transplantation. I shall not attempt to explain it elaborately, but simply ask my readers to accept it as a fact which perchance they may have encountered in other phases of our national growth.

But I was speaking of the favorable conditions attendant on the advance of electricity here, and may dwell upon one or two of them as pertinent to our present survey. Given a perfected invention, it does not follow that it is immediately available to all mankind. It is often alleged that telephony is cheaper in Europe than here. I have not found it so, taking into account the differences in cost of operation, of service rendered, etc.; but if it were true, the use of the telephone in Europe should have outstripped its use here. The very contrary is the case, and I attribute this chiefly to governmental monopoly and mismanagement, with its reflex action in checking enterprise in manufacture. Governmental telegraphy and telephony in Europe are worse than the governmental railroading, and that is saying a good deal. In England, where the post-office department permits private telephone competition with itself, the private exchange at Liverpool has ten thousand subscribers, while the governmental has not even twenty. That tells its own story. It is the same when we examine electric lighting. For years the industry was held back by all manner of serious restrictions, and even now goes ahead slowly, Germany being perhaps the most active country, as it is also in electric railway work. England, with its dense population, love of travel, immense wealth, short distances, and cheap fuel, is singularly tardy in regard to the application of electricity to street railways. Canada puts her badly to shame. Mr. E. F. Vesey, M. P., says: "I have described the backwardness of England in electric traction as a national calamity. If by this backwardness we have lost an industry worth $50,000,000 a year, and have deprived our workers of the best available means of getting from their homes to work, this is surely not too strong a description." Mr. Vesey blames governmental meddling and repress-

ive acts of Parliament. He points out also that when municipal authorities have ventured into street railway operation, they have compared very unfavorably with private companies in America, and, with the natural inertia of official bodies, have been extremely slow to accept the boon held out by electricity.

In the United States, on the other hand, neither electric lighting nor electric railways have suffered much from the legislation that stifles and kills under the mistaken idea of doing an indefinite good to the public as a whole. It cannot be denied that when the trolley was introduced, and began its beneficent career as a creator of millions of homes, it was assailed by a sensational press that literally foamed at the mouth in recounting its "deadly" deeds. But to-day, thanks to the intelligence and enterprise of the public, undisturbed by lurid head-lines, $1,500,000,000 is invested in trolley roads in America. When a new road starts it is an occasion for fireworks and oratory, and injunctions are taken out to prevent a line from running along one street in preference to another. That is the American way of accepting a new industry. That is the American liberality of mind which has given us the trade whose loss Mr. Vesey deplores, for at the present moment, thanks to our home development, we are electric railway builders to the universe.

So, too, with electric lighting. The years are not so remote when the forefathers burned their lard lamps and "cruisies," but each generation, with characteristic, divine discontent, has expected better methods and has patronized them when found. In America the arc light for the streets was taken up two decades ago quite eagerly. The incandescent lamp, for interior use, followed less rapidly, but is to-day by far the more rapidly increasing of the two. Many of our cities skipped by their newness the intermediate stage of gas, and from oil and candles plunged at once into the radiance of the electrics. All this was done without restriction; in fact, the absence of rules and regulations was extraordinary. Then, the electric light having provided the circuits over which the current might flow, the electric motor, energized from the same sources of supply, sprang into useful being, and in its turn, unrestricted and unhampered, began the era now opening of the electrical transmission and distribution of power. The readiness and the flexibility of electric power have appealed peculiarly to American ingenuity and inventiveness, and the range of the motor to-day is wider, I fancy, than that of any other piece of American mechanism.

The condition which, most of all, in this country has favored electrical manufacturing development has been cheaper current; and to the continued steady lowering of the price of current I look for the great strides of the future. This may need a little explanation. I am speaking now not of telegraphy and telephony, which use current in very minute doses, but of the other arts to whose apparatus current must be sent out incessantly from the power-house in huge volume—lights, railways, power motors, elevators, mining plants, etc. Not so very long ago, in our great cities, the charge for an arc light per night was from eighty-five cents to a dollar. Such lamps are now supplied at from twenty-five to forty cents, or even less. Current for incandescent lamps cost once about twenty-five cents for the equivalent of one horse-power for one hour. It can now be had for five cents, with even lower rates for steady supply to motors. It is obvious that at the earlier rates the customers would be few and the demand for current small, with the corollary that the appliances would themselves cost more. But since the panic of 1893, when the prices for nearly all apparatus were very high, the cost of manufacture has lessened marvelously, and prices have correspondingly fallen off, to stay low permanently, on the safer basis of a larger consumption. Carbons for arc lamps cost originally sixty or seventy dollars a thousand; they now cost not much more than six or seven. Incandescent lamps were sold at eighty-five cents apiece; now fifteen cents is nearer the price. Electric car equipments once cost three or four thousand dollars; they can now be had for

one quarter of that. So it goes all along the line; and it is the interaction and reaction of cheaper current and increased consumption that gives us also such a hold on the foreign market. Moreover, we have tried very hard, and not unsuccessfully, to standardize the product, making life less a burden for the manufacturer.

It may be fairly said that in Europe the apparatus for nearly every lighting plant or railway, if of domestic build, is "special." In other words, the maker "jobs" but does not manufacture. Here, on the contrary, the tendency has happily been toward the adoption of certain sizes, units, voltages, so that nearly all modern plants are a grouping of these units produced on the most economical plan. This absence of odd sizes and of "freak" plants also renders interchangeability easy and makes repairs cheap. Producing, therefore, on a smaller, retail basis, and with a great deal of specializing in each case, the European manufacturer has found himself often at a terrible disadvantage when meeting a competitor who has, first of all, a vast market of his own close at hand ready to take standard styles and sizes, and who can then turn round and export his surplus output on narrow margins of profit, his foreign customer knowing that the apparatus is already doing its work most satisfactorily. Such conditions are not likely to change against us, as we have further the advantage of being henceforth the largest producers in the world of the raw materials most used in electricity—iron, steel, and copper. Our patent office system, by its generous provisions, stimulates inventors in their efforts to open up new fields, and the degree to which we have carried the elimination of hand labor is in itself one of the greatest of our causes and guarantees of superiority.

This feature has been mentioned to me by distinguished Europeans with high praise, after inspecting some of our big electrical shops. Lord Kelvin, while here in 1897, told me he was much impressed by it. I refer not only to the production of big machines entailing the use of overhead cranes and runways on account of their bulk, but to minor supplies also. In 1878, the sticks of carbon consumed in arc lamps were made by some twoscore processes of hand labor. At the present moment, only one or two hand processes survive in that branch, and for aught I know—a certain amount of trade secrecy pervading the industry—they also may have disappeared before this article appears in print. Mr. Edison, up at his magnetic iron ore mining and separation plant in the mountains of New Jersey, told me once that to reduce the human labor required was his chief aim there, and that every time he "saved a man" he felt like throwing his hat up in the air and shouting. His conception of the world is a congeries of electrical machines to be worked from one switchboard while mankind goes off and plays. All he wants is to be the one man at the board.

It may have been gathered, incidentally, from one or two remarks in this article, that I disbelieve profoundly in government monopoly. Not less do I doubt the wisdom of private monopolies. They never win out in the long run. There have been masterly attempts to erect them in the manufacturing electrical field, and we in the industry have all suffered from them, but I have never known a moment when every branch of the art was freer from artificial monopoly than to-day. I do not know any industry in which success depends less on past performance or more on present merit. Those of us who have lived through the initial periods of foundation-laying and have sweat blood to "make the thing go" are readiest in our welcome to the younger generation, which, upon that foundation, is uprearing a structure far fairer than was ever dreamt of by us on land or sea.

It is not improbable that we have before us a period of great and profitable electrical investment and speculation. All the telegraph stocks are strongly held; the prices of telephone securities are high; the local lighting companies are favorably regarded for their large earning capacity, and I am under the impression that the majority of the trolley roads are doing handsomely, as their quotations continually go up. Growth

in each field is at a very fast pace. The result of all this must be a better price for the stocks of the manufacturing companies, which are now more numerous than ever, and which enjoy in these outlets a widening market for their product. Besides, new fields of consumption open up unfailingly. Two or three years ago electric heating and cooking were chimerical. Now devices turning electric current into heat for a variety of purposes are in use by the thousand, invited to commercial perfection by the cheapening of current. Two years ago the Röntgen ray was the latest scientific novelty. Now it is a part of the surgical outfit of every army and navy, probing deeper than the knife, saving life and limb, but leaving no wounds. A few years ago Mr. Edison was ridiculed because he said he was going to devote his attention to electrochemistry. Now the acceptance of electrical methods in chemistry and metallurgy is perhaps far more rapid than in any other branches of technical industry.

All this means new opportunity of employment and investment in electrical manufacturing, with abundant chances for the making of honest fortunes. Let the novice beware. There is gold in the sea, and we can make diamonds in a little chalk block; but if you are told that the gold can be extracted profitably and that any electric furnace is better than a South African mine, take the advice of the best electrical expert in your neighborhood before leaping into the enterprise. Then leap.

WILLIAM PITT.

BY JOHN W. PERRIN, PH.D.

PROFESSOR OF HISTORY IN ADELBERT COLLEGE.

THE most famous English ministers of the eighteenth century were the Earl of Chatham and his second son, William Pitt. The latter was born at Hayes, May 28, 1759. The year of his birth, by the splendid victories of English arms on both land and sea, saw his father's famous ministry reach its zenith. In America, Johnson captured Fort Niagara; Amherst took Ticonderoga; and Wolfe defeated Montcalm on the Plains of Abraham. On the sea, a victory was won by Boscawen at Lagos; and another by Hawke in Quiberon Bay. In the south of India, too, British supremacy was established. For all these victories credit was given to the great commoner, and the name his son now inherited was "the most illustrious in the civilized world."

The younger Pitt was born a politician. From his infancy he was taught to look forward to a career in the House of Commons, and all his training had this end in view. A feeble constitution made it necessary that he should be instructed at home instead of in the great public schools where his father, and most other English statesmen of that time, had been. His studies were frequently interrupted by illness; nevertheless they were carried on with great success. He early gave evidence that his mental powers were of the highest order. At seven years of age he was interested in serious studies, and he discussed books and events so understandingly as to amaze his parents and instructors. Macaulay quotes from a letter of Lady Chatham to the earl in which she says, "The fineness of William's mind makes him enjoy what would be above the reach of any other creature of his small age." Indeed, all the accounts that we have of his early boyhood indicate that he was an example, as were Macaulay, John Stuart Mill, and Gladstone, of infant prodigy that ripened into brilliant manhood.

When he was fourteen he was sent to the University of Cambridge. Three years later he was given the degree of Master of Arts. For some years yet he continued to reside at the university, diligently applying himself to his studies. He excelled in mathematics and gave much attention to

the classics. So complete was his mastery of Greek that a competent judge, Lord Grenville, declared in later years that he was the best Greek scholar with whom he had ever conversed. Of modern literature Pitt knew much less; however, he was acquainted intimately with Shakespeare and Milton. One of his favorite passages of the latter author was the debate in Pandemonium, and long years after his death his early friends were fond of telling of "the just emphasis and the melodious cadence" with which he was wont to recite the speech of Belial. In these years at the university he acquired an extraordinary stock of learning; indeed, all that he ever possessed, for he early became too busy with events to have time for books.

He entered the House of Commons at the age of twenty-one, representing the "pocket borough" of Appleby. His first speech was in favor of Burke's plan of "economic reform." His eloquence astonished all who heard him. Fox declared that he had become already one of the first men in Parliament; and Burke, it is said, "moved even to tears, exclaimed, 'It is not a chip of the old block; it is the old block itself.'" Twice again during this session he addressed the House; each time he sustained the reputation of his first speech. In the next session, in the debate that followed the news of Cornwallis' surrender at Yorktown, he spoke with even more brilliancy and ability than on any former occasion.

When the Rockingham ministry came into power Pitt was offered the vice-treasurership of Ireland, an office that brought a salary of £5,000 a year. To the astonishment of his friends, he declined the office because it would not give him a seat in the cabinet. A few days later he made a public declaration in the House that he never would accept a subordinate position. At the end of three months Rockingham died. Lord Shelburne now formed a ministry; and Pitt was given the office of chancellor of the Exchequer and the leadership of the House. Shelburne's inability to rule men, because of his suspicious nature and insincerity, prevented his ministry from lasting longer than time to conclude a definitive treaty of peace with the United States. Patience on the part of Fox would have made possible a reforming ministry in which he and Pitt would have played undoubtedly the leading parts. Patience, however, was not a quality of Fox. Unlike Pitt, he was unwilling to wait. He now formed with North an unscrupulous "coalition" which enabled them to control the votes of the House. A "coalition" ministry with the Duke of Portland as prime minister succeeded that of Shelburne. In a short time, the ministry was defeated on a bill introduced by Fox, for the transfer of the government of India to Parliament. Now was George III.'s opportunity; to free himself from the hated "coalition" he invited Pitt to become prime minister.

Pitt accepted the office. He adopted the then established Tory doctrine that ministers should be named by the king. However, he went a step further and introduced the long-forgotten principle that a final decision could be reached only through an appeal to the constituencies. The coalition opposed him in this; and when Pitt was beaten, Fox contended he should resign. But Pitt would not resign; neither would he dissolve Parliament until he could win an advantage over his opponents. Sixteen times he was defeated before he attained his end. Then with a majority of one the appeal to the constituencies was made. The nation was with Pitt. It admired his character and the inflexible resolution with which he had withstood the demands of the odious coalition. As a result, one hundred and sixty coalition members lost their seats. Popularly, these were known as "Fox's martyrs."

Pitt was now supreme. He was but twenty-five years of age, and was the favorite of both the nation and the king. He held his high office for seventeen years, crushing every opponent and holding England at his will. Down to the beginning of the great war with France in 1793, his administration is distinguished by a long series of reforms. Within this time he opposed

borough-mongering, favored economy, and effected important constitutional changes. He gave the affairs of India his first attention. In the late Parliament, he had endeavored to secure the enactment of a law that would better regulate the affairs of the East India Company. His efforts were unavailing. Now he succeeded in establishing a constitution which, leaving all business and patronage in the hands of the company, gave the government control over all political affairs.

It was in finance that Pitt achieved his greatest success. Even in his first budget he proved himself an able financier. In 1786 he succeeded in carrying through a commercial treaty with France. He had learned from Adam Smith's "Wealth of Nations" that "freedom in trade is good for all nations concerned"; in this treaty he succeeded in securing a reduction of duties on the products of both countries. A year earlier he had attempted to secure the commercial freedom of Ireland; but so great was the opposition of the traders that he was compelled to abandon his project. In the year in which the commercial treaty was made with France, he established a new sinking fund by which a million of pounds raised each year by extra taxation was to be invested at compound interest and applied to paying off the national debt. It was not until 1813 that the fallacy of this was exposed. In Pitt's day the nation viewed the fund with great favor.

I have said that Pitt was opposed to borough-mongering. Twice before he became prime minister he attempted to accomplish parliamentary reform. In 1785 he proposed to set aside one million pounds for the purchase of seventy-two seats that were virtually in private hands. His bill was rejected, and he never again offered another for this purpose. It was about this time, too, that the agitation favoring the abolition of the slave trade began. As early as 1773 Lord Mansfield had given a decision that a slave imported into England became free. Eleven years later Thomas Clarkson was awarded a prize at the University of Cambridge for an essay entitled, "Is it right to make slaves of others against their will?" Clarkson resolved to devote his life to a crusade against African slavery. He succeeded in winning the support of Wilberforce; and the latter in 1788, it is said, believing he could live but a short time, exacted a solemn promise from Pitt that he would use his influence to effect the abolition of the slave trade. In this same year, largely by Pitt's influence, a bill was carried for the provisional regulation of this trade. It was in advocacy of the abolition of this odious traffic that he made, in 1792, what was probably the most brilliant speech of his life.

The whole of this period of Pitt's administration was marked by success. It ought not to be overlooked, however, that much of his strength came from the industrial revolution then taking place in England. Wealth and population were increasing rapidly. Manufacturing industries, due to the inventions of Hargreaves, Arkwright, Compton, and Watt, were spreading rapidly. Manufacturers had become wealthy, and now, jealous of the landed aristocracy, they gave their support to Pitt against the great Whig families.

The reform movement was brought to an end by the French Revolution. The events that now took place in France so shocked the English nation that it produced a temper decidedly opposed to changes in government and institutions. It is true that in England there was much divergence of opinion regarding the events taking place in France. Fox gave them unstinted praise. To him the fall of the Bastile was "the greatest event that ever happened in the world." Burke saw only evil in the revolution. He declared that his dying words would be, "Fly from the French Revolution." In 1790 he published his "Reflections on the French Revolution," in which he sagaciously pointed out the dangers of making sudden and radical changes in the institutions of a nation. Later he gladly would have seen England the ally of Austria and Russia for the crushing of revolutionary principles. While Pitt agreed with neither, he inclined more to the view of Burke than

that of Fox. He opposed intervention and gave all his energies to the preservation of peace. He was so confident of his ability to carry out successfully his policy of neutrality that as late as 1792 he expressed the belief that peace was secured to England for the next fifteen years. But the September massacres gave his peace policy a rude shock; and subsequent events of the revolution forced him into war.

The prescribed length of this article renders it impossible to trace in detail the events of this period of his administration. It is almost enough to say that his administration was now as eminently unsuccessful as in time of peace it had been successful. All through the war he was constantly anxious for peace, and on four occasions he made overtures to secure it. Twice, too, when he believed that peace was impossible he endeavored to combine Europe against the common enemy; but he was most unfortunate in his allies and equally so in his generals. Throughout the entire period the enemy on land was almost uniformly successful. In 1797 two formidable mutinies broke out in the fleet. The first was at Spithead and the second at the Nore. In the year following a rebellion broke out in Ireland. But no disaster daunted the spirit of the prime minister; whatever evil came, from his place in Parliament he poured forth "the language of inextinguishable hope and inflexible resolution."

One other event in this period of his life should be mentioned. This was the union of Great Britain and Ireland. As far back as 1785, when aiming at a commercial union with Ireland, Pitt had expressed a desire to make England and Ireland one country in effect. It was a part of his scheme when the union was accomplished to relieve the Roman Catholic laity from all civil responsibilities and to support their clergy out of the public funds. But George III. opposed these concessions, and his obstinacy frustrated the designs of Pitt. Chagrined by failure to accomplish his purpose, the prime minister resigned in 1801. Now Addington, who was warmly attached to Pitt, but opposed to Catholic emancipation, formed a new ministry. For a time Pitt gave the new administration his support.

As far as the war was concerned, the plans that Pitt had made before his resignation were crowned with success. Preliminaries of peace were signed at London in October of this year, and in the following March a treaty of peace was signed at Amiens. It was one of the conditions of this peace that England should give up Malta to the Knights. Believing that Napoleon intended to reoccupy Egypt, England refused to give up the island. As a result the war was renewed in May of 1803. Napoleon seized Hanover and threatened to invade England. Public opinion now demanded that a stronger ministry be formed; on May 10, 1804, Pitt once again came to the head of affairs.

Nelson's victory at Trafalgar saved England from the threatened invasion. But the success of Napoleon on land was stupendous. Shortly after Nelson's victory he had won the decisive battle of Austerlitz. Austria was humbled, and the conqueror dictated the peace of Presburg. Undoubtedly, these events hastened Pitt's death. During his last days he wore a peculiar look, which Wilberforce pathetically described as the "Austerlitz look." He died January 23, 1806.

In appearance, Pitt was tall and slender. He was haughty in manners and most austere in morals; his one weakness was a liking for port wine. He had immense industry and marvelous skill in debate. A contemporary has said of his speeches: "Nothing seemed wanting, yet there was no redundancy. He seemed as by intuition to hit the precise point, where, having attained his object as far as eloquence could effect it, he sat down." In debate, too, he made frequent use of "freezing, bitter, scornful sarcasm 'which tortured to madness.'" Macaulay has described him as "a minister of great talents, honest intentions, and liberal opinions, preeminently qualified, intellectually and morally, for the part of a parliamentary leader, and capable of administering, with prudence and moderation, the government of a prosperous and tranquil

country, but unequal to surprising and terrible emergencies, and liable, in such emergencies, to err grievously, both on the side of weakness and on the side of violence." Lord Rosebery has said, "No one suspected his honesty; no one doubted his capacity; no one impeached his aims."

At the end of the century, Pitt is respected as the enlightened financier, the sincere reformer, the wise statesman in the years of peace. But his management of the war must be regarded as disastrous. Still in his own time he was looked upon as "the pilot that weathered the storm."

OPENING THE DOOR.

Behold, I stand at the door and knock; if any man hear my voice and open the door, I will come in to him, and will sup with him, and he with me.—*Rev. iii. 20.*

I WANT to pause before this wonderful image of Christ standing at the door of human life, and asking, like a weary traveler, to be let in. It seems to set before us the two ways in which a man may stand over against the possibilities and opportunities of his life. One way is as if we stood outside of these possibilities, trying to get in to them: the other way is as if they stood outside, and were trying to get in to us. Under the one view, we stand at their door and knock, if perchance they will let us in: under the other view, they stand knocking at our door, if perchance we can hear their voice and let them in. The first view of life is the common one. Its possibilities seem hidden from us under lock and key, and we give ourselves with all our efforts to unlocking them. We are like the besiegers of a city full of treasure. The money and the successes which we seek lie within, and we stand not so much knocking at their door as battering at their gate and scaling their wall.

This, I say, is the common way of looking at our life—the way of attack and struggle and victory; and perhaps it is the only way in which one can regard many of the problems of his money-getting and his competitive success. But, when we turn to the deeper experiences of life, the other way begins to open. Truth, beauty, love, wisdom, peace, forgiveness—of these things, which are the great possessions of human life, it is not so true to say that they hide themselves from us as that we hide ourselves from them and will not let them in.

Take, for instance, any scientific discovery, such as the electric light which illuminates our streets. There it has been—this wonderful power of electricity—surrounding human life with its possibilities of usefulness, and knocking at the doors of scientific men since science began; and, at last, a few men are able to hear this persistent knocking and open their doors, and then these inventions of electricity find their way into our affairs. We call it a new force, but it is not a new force. It is only a new awakening of the mind to understand a force which has been always bearing upon us. It is almost terrible to think of the many other secrets of the universe which must be thus still knocking at our doors and waiting to get in to us, and to imagine how senseless and unreceptive we must seem to an omniscient mind, when so many blessings meant for us are beaten back from our closed minds and wills. And think still further, how it is that such truth does reach men when it reaches them at all. It is not by lying idle and passive for its approaches. It is not without effort and discipline that such insight arrives. No; it is by training the mind, so that it can open its doors. This is the end of education—the opening of the door of the mind. It is the making one's self quick with receptivity toward truth, so that when truth speaks we hear its voice and recognize it as the voice of truth, and let it in. Most men are so sluggish that they do not hear the knock; many men are so feeble that they can-

not open the door. But when a truth is first heard and then welcomed, then it is that a great discovery is made. We say that the man discovered the truth, but to the man himself it is as if the truth spoke to him and he had heard its voice and let it in.

The same thing is true in a man's relations to his duty. When we have to determine between right and wrong we are apt to take refuge in the idea that it is hard to find out what is right, that our duty hides from us, and that we are trying to find out what it is; and because it does not let us in when we are knocking at its door, therefore we make our mistakes and commit our sins. But the fact is that this is very rarely true. If we set ourselves with a perfectly open mind to see what is right and to discover what is wrong, it is one of the rarest things in the world that duty is not made clear. How do we act? We do not honestly try for this one end alone. We shut out from ourselves this clear distinction. We mingle it with other motives. We do what is wrong and pretend to ourselves that it is right. We think that what is manifestly wrong will change itself some day into right. I suppose that even great crimes come about thus. A man in his business moves step by step into fraudulent practices, until at last both he and society are smitten with a great disgrace, and yet at every step he defends himself with the assertion that he has done nothing wrong. He blurs his sense of right. It is not that his duty is not there, but that he will not hear its voice. It is knocking at his door, but he pretends that there is no knocking and bars himself against the summons. And then, at last, he looks back over the whole awful series of slight perversions of the right and sees that at each step his duty stood before his life, plain and persuasive, if only he would have heard its voice and let it in. There is no greater self-deception than this imagining that it is hard to find out what it is right to do. The difficulty lies not in the revelation of the right to us, but in the opening of ourselves to the revelations of the right. Duty stands, for the most part, close at hand, unobscured, simple, immediate. If any man has the will to hear her voice, to him is she willing to enter and be his ready guest.

Now, this which is true in the world of thought and in the world of duty is —as I want to say, with even more of seriousness—true of the largest relations in which we find ourselves—the relations of religious life. When we first think of religion, it seems to us a matter full of difficulty. God seems to hide himself, and we seem to be searching for him with our books and our learning amid the mysteries of his hiding-place. Christ seems to us a problem which we have to solve, and which has perplexed the wisest of inquirers. The blessings of the religious life, such as the forgiveness of our sins, seem to be kept under lock and key, as though we were knocking at the door of a severe Divinity and asking, as suppliants, to be let in. But what is the truth about religion? The great and awful truth —awful in its stupendous simplicity—is this: that these infinite blessings are seeking us before ever we search for them, and are waiting, not for our proof, but simply for our acceptance. We think we discover, verify, and prove them. Scholars knock at their door with the books which solve these problems; and indeed there are mysteries enough to satisfy all learning and research. But the deepest mystery of all is this: that if the love of God, the power of Christ, the forgiveness of sins, are to have any reality for us, it must be as living and active forces knocking at our doors and asking to be let in.

How are we to think of God? It must be as always accessible if we would but have it so, searching for us before ever we searched for him. We loved him because he first loved us. When we turn to him, it is but our answer to his call to us. It is the father of the prodigal—waiting with an infinite patience and love and coming to meet us, if we will but turn even with faltering step and make ourselves accessible to him. How are we to think of Christ? Behind all aspects of him, as the problem of the ages, and all the perplexity of his wondrous per-

sonality, lies the power of his practical and present leadership. We do not first find him, but he finds us. It is not the sheep which look for the shepherd: it is the shepherd who searches for the sheep; and when they hear his voice they follow him. Even so Christ calls to men: "Behold, I stand at your door and knock. If you will not hear my voice, I cannot enter; but if any man will hear my voice, I will come in." And how shall we think of that forgiveness of our sins for which we pray? It, too, is waiting for us—waiting with the infinite pathos with which a parent waits for his sinning child—knocking at our door, if we will but let it in. There is nothing complicated or mechanical or unnatural about the forgiveness of sins. There is only one thing that forbids it. It is the locked door of our own hearts.

See, then, the wonderful simplicity of religion. Here, on the one hand, are our own lives, shut in, limited, and self-absorbed; and here, on the other hand, are these great powers of the universe, wanting to get in to us, and between the two only one barrier—the barrier of our own will. What a terrific thought it is that the spirit of God is forever thus trying to reach us, and that the power of a Christian life is standing like a weary traveler knocking at our door!

God grant that in these moments of withdrawal, when we turn from the stir of our busy lives to the quietness of this place, there may be a little of this opening of the doors of our wills to these heavenly visitants! It is not a work that makes a noise or sensation—this unbarring of one's life. It is not a work that one man can do for another, or that can be preached or forced into a life. No power—not that of God himself—can open that door from the outside. Only the soul itself can open itself. But if, with perfect simplicity and unaffectedness, any one of us is able just to put aside the bolt of his own wilfulness and open his door and say: "Almighty God, come in to me! Spirit of Christ, be thou my guest! Father, I have sinned, forgive me," then it is as if these sharper days of winter were melting into the approaching spring, and as if one of us came down some morning in his heated house, and should throw his door open to the gentler air, and there should flow in upon him the milder freshness and the purer fragrance of a renewing and reviving world.—*Francis G. Peabody, in "Harvard Vespers."*

GOD IS A SPIRIT.

God is a spirit; and they that worship him must worship in spirit and truth.—*John iv. 24.*

GOD is a spirit, man is a spirit. This is the rational basis of religion. It is in practical recognition of this truth that throughout this land and in other lands thousands of devout men and women have this day entered into communion with the Father of their spirit, spirit with spirit, in spirit and truth, supplicating God that he would give his presence and favor to our schools and colleges. This is a witness of how closely our schools are bound up with the hope of the home, of the church, and of all who love their kind and serve their God. Surely here, where the very ground beneath us has been hallowed by the feet, by the knees of the best men the world has seen, where our charter is emblazoned in our windows, where the very air is full of supplication which has never ceased for more than two hundred and fifty years—here we, who are the sons of our fathers, may well bow before him, and pray that as God was with the fathers, so he will be with the children. This is fitting. It is more than fitting. It is possible; and it is partly as an illustration of the truth which our Lord spoke, sitting on the low curb of the well of Samaria, that I bring it to your thoughts at this time. It has its own weight and merit to commend it, but it illustrates in an impressive manner the truth which Jesus taught. For, if a man

can draw near enough to God to worship him, he can come near enough for anything. He can enter in the fullest way into relationship with him—the relationship of a child with the father, out of which we wander, but to which he persistently recalls us. When we shall learn this truth and believe in it, or rather when it shall believe in us, and shall become part of our truth and part of our life, then there shall come that wonderful enlargement of our whole being, that broadening of our horizon, that deepening of our thought, that uplifting of our purpose, which will make us feel how great and holy a thing it is to live.

Think for a moment. It is possible for us because we are spirit, just as God is spirit, to have intercourse with him, to talk to him, to listen to his voice. Nay, this is more than possible. It is permitted to us, it is required of us, not by precept or commandment alone, but by the instinctive craving of the child for his father's presence and love. In the commonest things of life, in the greatest things of life, when the crisis comes to us, at the strategic moments of our life, we can come to him for counsel, for wisdom which is never denied, never grudgingly bestowed, but bountifully given to any one who seeks. We are pushed along beyond all that men can do, and all that men of themselves can be, when our spirit is truly in his spirit. There are wise counselors, kind friends, generous instructors, but

> What are they all in their high conceit,
> When man in the bush with God may meet?

Think, again, that this spiritual life is ours as it is God's, and ours because it is God's, and that it may be continually strengthened, reenforced, out of the spirit which God is; that our life is but so much of God's life, incarnate within these human limitations. It is so much of the life of God, unbroken between him and us, as a ray of light is unbroken through its ninety millions of miles from the sun above us to the glass by which we shatter it into its separate splendors. We can ascend along this line of life to him as he comes by this line of life to us. If that wonderful thought of our having God's life possesses us, we shall rise to live with him. For think of this again, that it is possible for us to take God's life and, in our measure, to live it here among men, though we cannot do it by ourselves. We can do it each in his separate place and in his separate opportunities, not by standing apart from him and doing what we wish, but by living in him and doing what he wishes. It is as if he divided the work he would have done in the world, and allotted to each man his portion.

There has been one instance of faith in the world, one that towers above all others, when our Lord Jesus Christ committed into the hands of eleven men the work which had brought him into the world, and gave them their commission, to go into all the earth "even so" as he was sent into the world, and to be witnesses to the truth and life of God. The eleven have been multiplied to thousands. Yet it is only when we place our thought in his thought, and set our personal incomplete lives in his life, when we take our part of God's purposes and change it into our conduct and establish it in our purposes, that we do the work which it is given us to do. When we pray "Thy kingdom come, thy will be done," we are not praying for the conversion of the Gentiles so much as for the little kingdom over which we rule, that it may become the kingdom of our God and be governed by his guidance, that his protection may be our safety and his glory our honor. We rise into this high and holy life with the divine spirit, our spirit with his spirit, only as we learn to know this simple, natural, eternal truth: that, as God is spirit, man is spirit, and man can worship God in spirit and in truth.

But why do we divide these things? Do we not need to unite our life, and give to it one meaning and intent? Do we not need to bring all our powers into one power and all our plans into one plan? But where shall they be united? Never anywhere, never completely at any time, save as they are united within the thought and desire of God. When a man knows what God will

have him do, he knows the extreme possibilities of his being. When a man is doing what God would have him do, he is doing the best which it is possible for him to do. God's purposes are marvelously fitted to our possibilities.

When one comes to feel all this, to break with himself and break with the world, not because the world is not kind and good, but because God is the All-wise, the Eternal, the Almighty, then there comes this transformation. No change from the darkness of night into the glory of morning, no change from the barrenness of winter into the life and beauty of spring, is so great as the change of the man's life when, raising his own thought, he has God's thought, when God's spirit breathes through his faculties, expressing itself in his energies, embodied in his purposes. Whatever the path before him be, it is the path that leads upward, beyond the splendid stars.

O brethren, let us say it over and over to ourselves until we fully believe and know it, and, knowing it, live in it—let us say it over and over till it becomes part of the very tissue of our being. God is a spirit. I am a spirit. I can talk with him. I can hear him, I can live by God's wisdom, I can be strengthened by God's strength. I can glorify God on the earth. I can lift my little system up into his great system and find my success in his accomplishment and the honor of my life in that honor which for himself he has foreordained. This is to live. Not until we have found this have we found the beginning of life. Not until we have come to this have we come to God. It is so simple, but so grand, real, and divine—here on the earth, yet reaching to the heaven of heavens! Then shall we make our career, our intentions, our successes, "not after the law of a carnal commandment, but after the power of an endless life."—*Alexander McKenzie, in "Harvard Vespers."*

THE GROWTH OF CHEMICAL SCIENCE.

BY L. H. BATCHELDER, A.M.

PROFESSOR OF PHYSICAL SCIENCE IN HAMLINE UNIVERSITY.

MODERN "chemistry is the study of the composition of substances." Its task is to ascertain the constituents of the material world, to reduce these constituents to their elements, and in turn to build up from them new chemical compounds.

The ancients possessed a knowledge of certain chemical processes, but these were made use of for practical purposes alone. Nowhere does there seem to have been among them any endeavor to obtain an insight into chemistry by the aid of definite experiments. It is certain that the Egyptians at a very early date possessed a large amount of practical knowledge concerning the preparation of metals and alloys, dyeing and pharmaceutical and antiseptic preparations. But this knowledge was empirical. The ancient Egyptians failed to observe the relation between the numerous chemical facts already within their knowledge, to group these facts together and derive conclusions therefrom, as did also the Greeks, after they had learned from the Egyptians, as they evidently did, many of these arts. But the fact seems to be that the Greeks, as well as the other cultivated peoples of antiquity, lacked the gift of observation. They were indifferent to natural phenomena. Again, their cultivated men regarded any form of manual labor as derogatory, and, as Aristotle said, "tending to lower the standard of thought." Investigation meant labor, so they were content to reason from the general to the particular, and to explain what they had never examined.

One of the earliest ambitions of chemistry was the artificial preparation of silver and gold. This task, the aim of the so-called alchemists, dominated a period stretching from about the fourth century nearly to

the middle of the sixteenth, though the exact date at which alchemy took its rise is lost in the obscure annals of antiquity. This period, extending to the intellectual awakening of Europe, the Reformation, was one long search for the Philosopher's Stone, by means of which not only were the base metals to be transmuted into the noble, but human life itself was to be indefinitely prolonged. During this period the same disinclination to observe and correlate facts carefully, and the same tendency toward untenable speculation which characterized the ancients controlled the thought and endeavor of the many tireless seekers after that *ignis fatuus*, the Philosopher's Stone. It is true, however, that a vast mass of chemical facts accumulated during this long period, many of them of the utmost economic importance, then and now, though their significance attracted no attention. While, then, the knowledge of technical chemistry was considerably advanced, chemistry considered as a science cannot be said to have received any considerable assistance from alchemy. After the early part of the sixteenth century, alchemy was gradually differentiated from chemistry, and during the last century finally fell into decay, though even in later years the chimeras of alchemy have held some pseudo-scientists in thraldom. Even now there is a strong inclination to speculate concerning the convertibility of elements chemically similar—speculations which to the chemist, it must be said, do not seem entirely without foundation. But it would be out of place at this point to discuss this ticklish question.

Tradition, which trammeled all minds during the Middle Ages and everywhere retarded the advancement of inquiry, lost in a measure its power under the awakening of the sixteenth century. The discovery of the art of printing, too, aided powerfully in the spread and propagation of new ideas. Under the new influences of the age chemistry freed itself in a measure from alchemy, and entered upon a new period, that known as the "Iatro-chemical Period." During this period of about one hundred and fifty years, as the name indicates, chemistry was associated most intimately with medicine. This was to their mutual advantage. The gain to chemistry was principally in an increased knowledge of those chemical preparations which were to be used in medicine. Some beginning was made in physiological chemistry, and in turn an increased knowledge of organic compounds was acquired.

The Iatro-chemical age was one of preparation, a period during which the young science was gradually prepared to assume an independent position. From the time of Boyle, born in 1626, the real aim of chemistry began to be recognized to be the discovery of new facts simply for the sake of the truth. The spirit of investigation began to exert itself in chemistry, and the inductive method gradually acquired a lasting influence. Of this method, its sometime reputed originator, Francis Bacon, said, "It begins with an ordered—not chaotic—knowledge of facts, deduces axioms from these, and from the axioms again designs new experiments."

The period from Boyle to Lavoisier, about one hundred and twenty years, was called the "Phlogiston Period," because it was this theory that chemists regarded as a central truth, and which until the revolution wrought by Lavoisier received their unqualified assent. This theory rested upon the hypothesis,* "that combustible substances, among which the metals capable of calcination were reckoned, contain phlogiston as a common constituent, which escapes on combustion or calcination. It was thought that all related phenomena could be explained by this assumption, therefore it was unnecessary to demonstrate the actual existence" of the substance itself. The one fact which made the acceptance of this theory possible and which accounts for the important part which it played for more than a hundred years was the entire neglect of quantitative methods in experimentation. This was more than a neglect to weigh substances carefully before and after calcination, for this seems to have been, at least, sometimes done. The chemist of that time seemed entirely oblivious to the necessary

* "History of Chemistry," by Ernst von Meyer, to which I am especially indebted in the preparation of this article.

logic of the fact of an actual gain in weight during such calcination. In other words, the quantitative idea had as yet found no place in his mode of thinking about chemical facts. The simplicity of the theory, too, blinded him to its disagreement with the facts. The theory possessed a value in that it introduced the idea of grouping together a great variety of what had hitherto been unrelated facts, and binding them into unity by a common and simple explanation. Thus the theory itself, false and often mischievous, may be said to have made for the advancement of the true science of chemistry. Far greater advancement was made in the acquisition of chemical facts during this period than during any previous time of corresponding length. Boyle, Black, Scheele, Cavendish, Priestley, with many others, greatly enriched the science by their researches and observations. The nature of an element was now first clearly understood, as also that of the chemical compound as distinguished from an element or from a physical mixture. During this period oxygen, hydrogen, phosphorus, chlorine, manganese, cobalt, platinum, and other less important elements were first identified. In technical chemistry, too, the advance was most noteworthy.

In the increasing number of able men devoted to chemical research, in the improved appliances and methods of investigation, in the clearer views and greater appreciation of the value of inductive methods, in the greatly increased knowledge of chemical facts, and especially in the discovery of oxygen by Priestley in 1774, the time was ripe for ushering in the new chemistry which was to develop during the nineteenth century into the splendid science of to-day.

Lavoisier, born in France in 1743 and executed in 1794 during the Reign of Terror, as is supposed through the machinations of Marat, whose scientific publications he had criticized, is sometimes said to have been the creator of the modern science of chemistry. This is too great honor to accord him, for, as has been seen, the foundations of the new science had already been laid during the survival of the old chemistry. Lavoisier early acquired a thorough knowledge of mathematics and physics, and it was from a physical standpoint that he first attacked the phlogiston theory, which assumed that during combustion and calcination phlogiston escaped. By delicate balances he sought to ascertain exactly the change in weight which took place during these processes. The result of these and other investigations furnished the foundation of his theory of combustion. The discovery of oxygen by Priestley, and independently by Scheele, put into Lavoisier's hands the key to the situation. With marvelous insight and skill he applied himself to the task of overthrowing the phlogiston theory, and the establishing of his combustion or oxidation theory. After an extensive series of researches, and by making free use of the discoveries and observations of Scheele and Priestley, he had by 1777 established its main points, which he announced as follows:

First, Substances burn only in pure air.

Second, This air is consumed in the combustion, and the increase in weight of the substance burnt is equivalent to the decrease in weight of the air.

Third, The combustible body is as a rule converted into an acid by its combination with pure air, but the metals, on the other hand, into metallic calcs.

The discovery by Priestley, an advocate of the old theory, that water is produced by the combustion of hydrogen enabled Lavoisier to explain correctly the remaining reactions on which the phlogistonists relied. So that by 1783 the theory was fully disproved, though some of its adherents were slow to acknowledge this.

Lavoisier clearly perceived the truth that no matter is lost during chemical reactions, that the weights of the constituents of a compound must always equal the weight of the whole compound, whatever the chemical changes through which it may pass. This seems self-evident, but not so to those whose fundamental assumption made heat a material. A new and correct theory now replaced a false, a complete reversal of thinking about the process of combustion was introduced, and, what was perhaps of more importance, the quantitative method

of investigation was inaugurated. Chemistry was set in a new path; henceforth it was to develop along scientific lines. Mistakes would be made, but its central theories would survive.

The remaining years of the eighteenth century were years of preparation for the next great advance—an advance of supreme importance. Just as it fell to Lavoisier singlehanded to establish, in place of the false phlogiston theory, the true theory of combustion, so to John Dalton, born in England in 1766, fell the lasting fame of firmly grasping and clearly announcing the atomic theory—a theory which has now become the central law of the science. Like Lavoisier too, Dalton had the genius to perceive the significance of the researches and reasoning of other scientists of more limited intellectual vision. He had, too, a skill amounting to genius as a practical investigator. Without doubt the work of Richter, a German chemist, in establishing the "law of neutralization," was one of the necessary steps in the preparation for the epoch-marking announcement of Dalton. The meaning of Richter's law is, that "when a given amount of the same acid is made neutral by different amounts of different bases, the latter are equivalent to one another." To Richter, then, should be ascribed the merit of creating stöchiometry, the art of chemical measurement which has to deal with the laws according to which substances unite to form chemical compounds. It was on such researches as these and his own investigations into the behavior of gases, of which he made many careful analyses, that Dalton founded his "atomic theory," the announcement of which dates from about 1802. The essence of this theory has been summed up in the following paragraphs:

First, Every element is made up of homogeneous atoms whose weight is constant.

Second, Chemical compounds are formed by the union of the atoms of different elements in the simplest numerical proportions.

The notion of the ultimate atom was by no means new. It was one which appealed peculiarly to the speculative Greek minds, and from their time down through the Middle Ages volumes were written about this little something. But, as we have seen, the ancients lacked the genius for investigation. The monks of the Middle Ages were given to abstract speculation about the "infinite divisibility of the atom." So that now, with the theory clearly stated, it was the first time in the power of chemists to inquire by actual experiments into the nature and conduct of this interesting little fraction of the universe.

Nearly all of the leading chemists of that time readily, even eagerly, accepted Dalton's theory. Though some did so with a reservation, all set themselves ardently to the task of working out the problems of the new chemistry. For they clearly saw that this theory as yet fell far short of solving the problem of the relative weights of the atoms. Dalton himself distinctly states that in order to determine the number of elementary atoms in the atom—note the word—of a compound, a knowledge of the composition of many compounds of the given element is required.

Shortly after the announcement of Dalton's theory, Gay-Lussac, associated with Alexander von Humboldt, began investigations into the relations which exist between the gases which combine with each other. Three years later Gay-Lussac, born in France in 1778, announced the brilliant discovery that "gaseous substances unite in fixed volumetric proportions which may be simply expressed."

Gay-Lussac was one of the ablest investigators and most stimulating and suggestive writers among the many able chemists of the first quarter of the present century. He is to be regarded as the originator of volumetric quantitative analysis. He left, also, the stamp of his work on many important branches of chemistry and physics.

It seemed clear to most chemists, including the great Berzelius, that this discovery added fresh arguments to the support of Dalton's theory, though Dalton himself refused at first to accept Gay-Lussac's conclusions. It was evident that both Dalton's theory and Gay-Lussac's law lacked completeness, since the conclusions de-

duced from them resulted in irreconcilable contradictions. Something was lacking, and in the confusion chemists almost despaired of a sound and satisfactory theory of the atom. The difficulty was solved by Avogadro, born in Italy in 1776, who in 1811 introduced the conception of two kinds of particles which we now think about by the names molecules and atoms. "Molecules of elements," said Avogadro, "are decomposed in chemical processes into atoms, to unite to form new compounds. Equal volumes of gases contain equal numbers of molecules." But the time was not yet ripe for a clear understanding of this beautiful and far-reaching law. Before that time could arrive much work remained to be done. Among these workers were Ampere, Wollaston, Berzelius the Great, Dumas, Gerhardt, Laurent, and others.

Laurent finally in the forties returned to the generalization of Avogadro, and founded a system on an atomic basis and a fundamental distinction between the atom and molecule. He said:

> A molecule is the amount of a gaseous substance which occupies twice the volume occupied by an atom of hydrogen, or the smallest amount of a substance capable of taking part in a chemical reaction. An atom is the smallest amount of an element which enters into the composition of a compound.

Thus at last the "missing link" between Dalton's theory and Gay-Lussac's law was supplied, and chemists began to arrive at a clear separation between the meaning of the terms atom and molecule. At last, too, a broad foundation of clearly-apprehended scientific truth was laid, on which there has been surely built up the great and still growing edifice of modern chemical science.

ENGLISH COLONIZATION IN THE WESTERN WORLD.

BY EUGENE PARSONS.

AT the time of the discovery of America, England included little more than the British Isles. Its territorial extent was not far from 120,000 square miles; now the area of the British Empire is above 11,000,000 square miles. In the Elizabethan age its population was only a few millions; now the inhabitants of Great Britain and her dependencies number over 360,000,000. Such is the growth of three hundred years.

In the sixteenth century England allowed other nations to outstrip her in exploration and discovery. Since then she has surpassed all other nations in acquiring foreign dominions, either by settlement or by conquest. English and Scotch names have been given to mountains and rivers, to islands and towns, in almost every part of the globe.

In the seventeenth century England began in earnest the work of colonizing both the islands and the mainland of the western world. The Puritans entered the wilderness of New England and transformed it. Englishmen, chiefly of the upper and middle classes, planted colonies in Virginia (1607), Maryland (1634), Pennsylvania (1682), in the Carolinas (1665–70), and Georgia (1733). These settlements, which formed the nucleus of the United States, by the revolt of 1776 became separated from the mother country. The history of the original thirteen colonies is, therefore, properly American, not English.

The story of the territorial expansion of England in North America really begins with the discovery of Newfoundland by Cabot and his English crew, June 24, 1497. The island was occupied and claimed by Sir Humphrey Gilbert in 1583, though long before this its valuable fisheries had attracted seamen of several nationalities besides the English. In the seventeenth century it had a floating population and no settled government. Colonization was for a long while discouraged. The presence of French fishermen was tolerated and certain privileges were granted them. As a result there has been no end of trouble

between the French and the English over the Newfoundland fisheries ever since. In 1876 Labrador became a dependency of Newfoundland.

Canada was first explored by the French, in the first half of the sixteenth century. But though the early French explorers were brave and enterprising men all that they did was to clear the way for British possession. There were few substantial results of French colonization in Canada. Great projects were in the air, but they were never realized. The French could not compare with the English as colonizers. They founded missions, forts, trading-posts, and scattering settlements. While they were successful explorers, hunters, trappers, fishermen, and soldiers, they neglected agriculture. Though they left their permanent impress on various countries of North America, men of Anglo-Saxon blood entered into their labors. An enormous expenditure of life and treasure availed not to save their sovereignty in the New World. Their exploits will live in history and fiction, but, after all, the real work of developing the resources of their western provinces was left to the English-speaking race.

The capture of Quebec by Wolfe in 1759 is one of the turning-points in American history. It gave England possession of an immense territory. The treaty of 1763 ratified the decision of arms. Says Greswell:

> From the date of the British occupation, 1763, Canada began quickly to fill up. It is estimated that not more than 8,000 emigrants had ever come from France to Canada, chiefly in the time of Colbert. These had increased to 65,000. . . . After the close of the American war there were thousands of British settlers who, rather than live under the flag of the United States, resolved to leave their homes and properties at vast sacrifices and go north to Canada.

Many of the Loyalist refugees found homes in New Brunswick, in Nova Scotia, and Prince Edward Island. It is said that 13,000 came in 1783, and in 1800 the number had reached 30,000. They laid the foundation of Upper Canada.

Through the efforts of the Scottish Earl of Selkirk a colony of eight hundred Highlanders was planted in Prince Edward Island in 1803; another settlement of Highlanders was made in what is now the province of Manitoba (1811–16). Other parts of Canada were settled by Scotch and Irish immigrants. "The climax of the emigration movement following the Napoleonic wars," says Greswell, "seems to have been reached in 1831, when the number of Canadian immigrants reached the total of 34,000." The entire population of the Dominion of Canada at that time was not far from 900,000, one third being French; it is now over 5,000,000.

The Hudson Bay Company has been an important factor in the development of the Northwest. For more than two centuries the officials of this famous corporation and its agents have traversed the wastes from Labrador to Alaska, trading in furs and other articles of commerce. These extensive districts are sparsely settled and only partially explored. The gold mines of British Columbia and the Yukon have attracted crowds of miners and adventurers. A notable event in the history of the Dominion was the building of the Canadian Pacific Railway, finished in 1886, which has rendered possible the enormous growth of the last decade.

The Bermudas, lying far to the north of the West Indies, were first discovered by the Spaniards early in the sixteenth century. No European colonists made their home in these peaceful "summer isles of the Atlantic" until Sir George Somers and his crew, bound for Virginia, were driven on their rocky coasts by a storm in 1609. This incident seems to have suggested a passage in Shakespeare's "Tempest," Act I., Scene 2. Emigrants from England landed in 1612, and the colony rapidly grew in numbers and prosperity. The islands had a rather romantic history in the eighteenth century. In the present century they have declined in trade and importance and are now only an out-of-the-way imperial station of the British Empire, the smallest except Gibraltar.

So long ago as 1605 an English ship touched the coast of Barbados and claimed

the uninhabited island for England, but it was not colonized until about 1625. During the troublous times of Charles I. and the Commonwealth the colony grew rapidly. "The leading colonists," says Lucas, "were mainly men of substance and family, with Royalist tendencies, and born and bred in the Church of England." In 1650 Barbados had a population of at least 25,000, which doubled in a quarter century more. It had a flourishing trade with the Old World and the New, its chief products being sugar, tobacco, and cotton. For many years this fertile, populous island was the foremost of the English colonies in the West Indies and was called the metropolis of the islands. It sent forth settlers and soldiers to Jamaica, Tobago, Trinidad, and North America. It has long been a commercial center and the military headquarters of the English in the West Indies.

Columbus sailed among the Leeward Islands on his second voyage in 1493, but no European settlements were made in these islands for more than a century afterward. Some of the Leewards belong to France, Holland, and Denmark. The islands belonging to England are St. Kitts (settled in 1623), Nevis (1628), Antigua (1632), Montserrat (1632), Anguilla (1650), Barbuda (1661–62), and Redonda (1661–62). The English conquered and occupied the Virgin Islands in 1672 and Dominica in 1761. Later the French gained possession of Dominica and other West Indian islands that were restored to England by the celebrated naval victory of Baron Rodney in 1782.

In 1498 Columbus discovered two of the Windward Islands, as the more southerly group of the Lesser Antilles are known. Englishmen landed on the island of St. Lucia in 1605, but were soon driven out by the natives. Though various attempts to colonize this group were made by the French and the English in the seventeenth century, they were doomed to failure, all except the French settlement of Grenada. In the Seven Years' War some of these islands fell into the hands of the English. The peace of 1763 secured St. Vincent, Grenada, and the Grenadines for Great Britain; St. Lucia was restored to France. Fighting went on, and the islands were taken and retaken. Since 1803 the British occupation of St. Lucia and the other islands has been complete and final.

The coast of San Salvador, one of the Bahamas lying to the southeast of Florida, is said to be the first land seen by Columbus (October 12, 1492). These isles were first colonized by settlers from the Bermudas in 1666, though one of them had been occupied for a while in 1629 by English Nonconformists. They were not permanently annexed to England until 1783. Says Greswell: "First the precarious abode of Puritan exiles, then the narrow perch of wreckers and pirates, then the asylum of Royalist refugees, then the headquarters of blockade-runners, the Bahamas have a thrilling record."

The island of Jamaica, discovered by Columbus in 1494, was for many years looked upon as the property of the Columbus family. It was settled by the Spaniards early in the sixteenth century. The Spanish colonists did little to develop its resources, and they were too few to resist Cromwell's soldiers, who seized the island in 1655. In 1670 Jamaica was recognized by Spain as an English dependency. The population was 3,000 when the English landed, but it increased rapidly thereafter, being estimated at 18,000 in 1673. Shiploads of vagrants, criminals, and others were imported from the old country, and settlers from New England and from some of the West Indian islands came in large numbers. It became the gathering-place of countless buccaneers, who ravaged the possessions of the Spaniards in the western world and fled to Jamaica with their plunder. For more than two centuries it had a troubled and eventful history, being the scene of many wars and insurrections. The large negro population was a disturbing element until the abolition of slavery in 1834. Then the planters turned to the Orient for a supply of laborers. During the period 1835–90, more than 300,000 were brought to the West Indies from China, India, and

Africa. Of these the majority were Indian coolies. There are about 15,000 Europeans in Jamaica—the total population being nearly 700,000. Since the speedily suppressed rebellion of 1865 the colony has enjoyed a prosperous peace.

Trinidad, discovered by Columbus in 1498, was colonized by the Spaniards in the sixteenth century. It had few settlers and these were attacked and plundered by English, French, and Dutch adventurers. Sir Walter Raleigh visited it in 1595, and so long ago as 1628 it was claimed by the English. Though rich in natural products, the island was neglected until 1783, when its inhabitants numbered 3,000. Then the Spanish government held out liberal inducements to foreigners to settle in Trinidad and develop its resources. Settlers, mostly French, poured in from the old country and from other West Indian islands. Its population had increased to about 18,000 in 1797, when the island was taken by the English, who have since held it. In the nineteenth century it has been "transformed from a sleepy Spanish dependency into a thriving British colony." In 1834 slavery was abolished, and, the supply of laborers failing, large numbers of Chinese and East Indian coolies were imported.

Not far away, to the northeast of Trinidad, which is the nearest of the British islands to the South American coast, lies the island of Tobago, united with it in one crown colony. Though discovered by Columbus in 1498, the Spaniards passed it by for larger islands. It was first settled by English colonists from Barbados in 1625, but the Indians drove them out. During the seventeenth century the Dutch, the French, and the English successively gained a foothold in the island. By the peace of 1763 it was ceded to Great Britain, and in 1783 it was ceded to France. Ten years later it passed into the hands of the English, and in 1802 was restored to France. Conquered again by the English in 1803, it has ever since been a British dependency.

The West Indian islands belonging to England form but a small part of the vast archipelago in the Caribbean Sea. None are large except Jamaica and Trinidad. The area of Jamaica and its island dependencies is 4,451 square miles; of Trinidad, 1,754 square miles. The area of some of the isles is to be reckoned by acres. The area of all the British Indies is something more than 13,000 square miles—an insignificant part of the empire. Yet they are highly prized colonies for their valuable forests and tropical products, and also for the military advantages they afford Great Britain in the western world.

Columbus sailed along the shores of South America in 1498, but Spain was not to enjoy sole possession of the new continent. Thither came the English and the Dutch in the latter part of the sixteenth century. In 1594 Raleigh explored the Orinoco River. Some years later (1604–29) several English colonies were planted on the mainland near the coast. Meanwhile the French and the Dutch also founded settlements, and for about a century they were the only Europeans in Guiana. The province called British Guiana was won from Holland by France in 1795, and was gained by England in 1803.

The history of the country now known as British Honduras contains some episodes as strange and interesting as any in the romance of western exploration and adventure. In the seventeenth century parts of Central America were settled by traders from England and Jamaica, attracted by the forests of mahogany and logwood. The Baymen, as the communities of woodcutters on the Bay of Honduras were called, formed the nucleus of a colony. They had many conflicts with the Spaniards, who were defeated by them in 1798 with the aid of a few British troops.

The Falkland Islands, lying in the southern Atlantic, were discovered by Davis, the Arctic explorer, in 1592. They were not recognized as a dependency of Great Britain until 1832–33. Far to the south of the Falklands, in the Antarctic regions, is the empty island of South Georgia, a desolate outpost of the British Empire.

(End of Required Reading for October.)

OUR COLONIAL POSSESSIONS.

BY CYRUS C. ADAMS.

WE have passed the period when all our brain and brawn is absorbed in the needs of internal development. We are now not only the largest food producers but also the largest manufacturers. We are turning more raw material into finished products than we can consume, and, for the first time, we are intently studying the world to find the best markets for our surplus; and we know we can compete with other nations, because our inventions and improvements in processes of manufactures have so cheapened the cost of many of our products that we can offer our goods at attractive prices and still pay labor more than it receives in other lands. At this auspicious moment, circumstances we did not invite have brought us into close touch with millions of alien peoples. It is our purpose here to consider briefly, not the moral obligations so suddenly imposed upon us by no merely human power, but the material advantages and responsibilities which our new position among the nations has brought us.

There are 500,000,000 of trading peoples, most of them far advanced in civilization, in the countries and islands of Southeast Asia. The walls that have hemmed them in are rapidly breaking down. The telegraph extends to-day from end to end of China. The next decade will see long railroads in operation in the best parts of that empire. Within a short time new treaty ports have been created, and the Si Kiang, one of the largest rivers, was opened last year to foreign trade for a long distance west of Canton. Western civilization never

A NATIVE HOUSE IN MANILA.

saw before such colossal opportunities for extending its commercial influence as are now presented by the countries of East and South Asia. Our country is eager to have its full share of these vast, new markets; and we need only glance at the map of the world to be impressed with the commanding commercial position we occupy. In these days of rapid and cheap ocean carriage no port of Western Europe has any considerable natural advantage over our eastern cities in reaching oriental markets, though as yet Europe has better facilities in respect of established steamship lines. But our Pacific seaboard, with its rapidly developing industries and commerce, occupies a position for dealing with the teeming millions of Asia that is vastly superior to that of any state of Western Europe. Our Pacific slope knows that it can turn its advantages to good account, and within the past few weeks two new shipping companies have been organized for the oriental trade, with Seattle as the home port.

But the Asian world is soon to be made far more accessible to our entire country than it will ever be to the states of Western Europe. The Nicaragua Canal is a practicable project whose early completion the world needs, and we shall have the lion's share of its benefits. The commission which our government sent to Nicaragua to study the whole question on the ground, including details of the route and constructive works, is now preparing its report, which will be submitted to Congress at the coming session. There is no doubt that the report will be favorable to the project and will advocate its early realization under the auspices of our government. Our new interests in the Pacific will intensify the desire of the American people for the completion of this canal; and the attitude of our citizens is clearly indicated by the press, and more conspicuously still by nearly all the state conventions held during the past spring and summer, which heartily indorsed the Nicaragua Canal in their platforms.

Within five or six years a large part of the Pacific's commerce will probably be passing through this completed waterway. All the coasts of Asia from Japan to Java desire the canal to be dug. It will give the Mississippi valley, as well as our Atlantic cities, more than an even chance with London, Hamburg, and Marseilles. It will bring Japan, China north of the Yangtse, and Australasia nearer to the Atlantic cities of the United States than they are to England. It will reduce the distance from our Atlantic ports to China and Japan by 5,000 to 6,000 miles and put the American manufacturer in a vastly better position to gain and hold his place in the markets of the Orient, where his European rivals are to-day so much stronger than he is. As our foreign trade has increased, the need of this canal has more and more impressed itself upon our business men and manufacturers; and with our new territorial interests in Pacific and Asian waters, which are bound to facilitate and stimulate our trade relations with the far East, the necessity for the canal becomes imperative.

Valuable as the Hawaiian Islands and the great archipelago of the Philippines are in themselves, they will be of even greater advantage to our commerce as stepping-stones and distributing points for the far greater field of the Asian coasts. What Hong-kong is to the trade of the United Kingdom Manila will be to our trade—a commercial clearing-house in the far East. Fifty years ago Hong-kong was a fishing village containing a few scores of squalid huts. It is now a splendid city of 250,000 inhabitants, and its prosperity grew out of the fact that it represented in the far East the greatest trading nation in the world. It made Great Britain a neighbor of China, Japan, and the islands of the Malayan waters, and, other things being equal, trading peoples are in the habit of dealing more largely with their neighbors than with others. Manila will be our Hong-kong and will rival it. In that splendid bay we shall have a commanding position in relation to all of China's ports from Canton to the Yangtse. We shall no longer be aliens, separated from the Orient by half the circumference of the earth, but will be part and parcel of it, with

THE MODE OF TRANSPORTATION IN THE PHILIPPINES.

A CONVENT IN THE INTERIOR OF THE ISLAND OF LUZON.

vested interests there and complete identification with its fortunes and development. To most of us the Orient has been little more than a geographical expression. It is henceforward to be to us a part of our life and work, and no man can measure to-day the immense development which this fact alone will give to our trade relations with the greatest of undeveloped markets, or the profound and blessed influence which the new relationship will exert upon the unnumbered millions of the far East in the coming century.

It is positively necessary, as we join the ranks of the world-wide traders, that we acquire a geographical continuity of coal supplies all around the world. Three fourths of the world's commerce is carried on steamships. The faster they travel the more coal they consume; and all the power created by the nations for the defense of their commerce depends upon the use of coal. Our armored fleet would be helpless in a sea where it could not replenish its coal-bunkers, and we can never maintain our hold on more than the driblets of Asian commerce unless we are prepared to defend our trade interests in Asian waters. We have now secured just what we need at Honolulu, Guahan, and Manila in the way of coaling stations on our most direct route across the Pacific. We have taken the vital step toward making the sea secure for our commerce.

Another great need of American commerce will be supplied all the sooner because we now have national concerns and responsibilities across the sea. Nothing else would do more to stimulate the building of the merchant marine, which is to-day one of the greatest desideratums of our commerce. We cannot continue to pay scores of millions of dollars a year to foreigners for freight carriage and compete with other nations in trade. We cannot pay the additional cost of trans-shipping freight once or twice to reach Spain, Greece, Turkey, and many other countries, to say nothing of the loss of time and damage to goods by extra handling, and still win the

race. Our Pacific coast, in particular, whose development will take giant strides if we make the most of our new opportunities, needs a large increase in shipping facilities owned and controlled at home. Our present position in this respect is something like that of Russia, which is said by a government commission to be losing about $37,000,000 a year through not having an adequate commercial fleet of its own.

We may look upon our acquisition of the Philippines, or a substantial part of them, as most important in a commercial sense for the impetus it will be sure to give to our activities in the far East, and the facilities they will afford for making our commercial position a commanding one throughout the entire Orient. But the islands have in themselves the elements which almost any nation except Spain would long ago have utilized to achieve a magnificent development. Contrast the condition of those hundreds of islands, a wilderness still except along the sea fringe of some of them, without roads, without native schools, without capital, without machinery, without the benefits of western ideas and directing intelligence, save those which a few Americans, Germans, and English have supplied, with the results of the Dutch *régime* in Java, the garden of the far East, the most densely populated land near the equator, gridironed with wagon roads and railroads, her native schools supported by the government, and covered from the sea edge to the mountain backbone with rice, sugar-cane, and tobacco fields, coffee trees and tea plantations.

Java, rich as nature has made her, has no natural resources that the Philippines do not equal or excel. The Philippines have a little the advantage in climate, for they are further from the equator. Even under the medieval *régime* of Spain, developed only along the sea front, torn by revolutions, oppressed by adverse political conditions, the Philippines have been making a wonderful record. Last year their exports were nearly $20,000,000 and their imports nearly $10,000,000. Manila hemp, which is their unique and greatest product, can find markets for several fold the quantity that is now supplied. China is now importing double the value of Philippine products which she purchased a few years ago, and it is said that with proper nurture of the trade China would buy as much hemp every year as the islands now produce. An enormous field for the trade in oriental products is the Orient itself, and that field has been almost wholly neglected as far as

HARBOR OF SAN JUAN, PUERTO RICO.

A BIT OF MANAGUEZ, PUERTO RICO.

the Philippines are concerned. The islands will be virgin soil, in which American ideas and methods, adapted to eastern conditions, will find unlimited possibilities of growth. It will be a work requiring time and patience, and abounding wisdom will be needed. But nothing in the Philippines to-day is what it may become under proper nurture and management. Sugar is the second largest product, but it does not give satisfactory returns, owing to the ignorance of the planters. Tobacco is third in importance, but it is capable of far greater development. Agriculture is in its infancy. One of our consular reports in 1889 said there was not a single well-kept farm in the archipelago. There is no agricultural machinery outside the sugar mills, engines, etc. A sharpened stick often does service as a plow; and yet these millions in the Philippines are largely of the same race stock as the Javanese, who, under competent guidance, have produced such remarkable results.

We have it in our power to half revolutionize the Philippines with our machinery. The greatest of our commercial opportunities in the newly developing parts of the world is the sale of tools and machinery. We are sending them to all parts of the world. At home, our superiority in these manufactures has been a large factor in our development. China is supposed to be over four times as populous as the United States, but the labor-saving implements and machinery we have invented give us a productive capacity greater than that of the entire population of China; and China and the myriad islands south of her are destined to be among our best customers for machinery if we get the share in their trade which we desire and to which our new position in the Orient will entitle us.

No wonder our Pacific coast is welcoming the momentous change that has occurred. The treasures of the East will be poured out on the slope like the rain clouds from the sea that burst over the California valleys. No part of America or Western Europe will ever find the far East so easily accessible as our Pacific states and British Columbia. It is predicted that the tendency of eastern peoples in future will be to eat less rice and more wheat, and all the wheat and wheat flour now consumed in China and Japan comes from our western coast. Korea, where timber is scarce, is just beginning to draw upon Puget Sound for house timbers, piles for her docks, and ties for her railroads. The statistics recently at hand of our trade with China show that our exports of groceries, machinery, and most other lines have made rapid advances. For instance, the imports at Chefoo in the third quarter of last year show a gain over the same period in 1894 of 43,910 pieces of American cotton drills, 95,275 pieces of sheetings, and 1,456,460 gallons of kerosene, the

THE MAIN STREET OF HONOLULU.

corresponding goods from Europe having suffered a considerable falling off.

The Hawaiian Islands have been the only foreign land in which our vessels, both in number and tonnage, have of late exceeded those of all other nations together in the shipping statistics of the islands. For many years we have had the chief commercial interest there. Eight years ago our trade with these islands was eighteen times that of Great Britain, our nearest competitor, and American citizens had invested then four times as much capital in sugar plantations as the British and twelve times as much as the Germans. Such facts as these might be multiplied in many directions to show how largely the interests of the islands were identified with ours before there was any talk of annexation. The privilege of joining us is an inestimable boon to these beautiful and fertile islands, which have almost completely assimilated our civilization and tendencies and depend upon us far more than upon all the rest of the world to inspire their activities; while we have won a most desirable prize by their acquisition, for their commercial value is great and their strategic importance is first-class. Here is the meeting-point for nearly all the steamers that ply from the west coast of North America to Asia and Australia; and the shipping traffic will greatly increase and establish a proud future for Honolulu when the Nicaragua Canal is built and European vessels follow the new route to Asia. The vivifying effects of the new political bond between us were shown in a very few weeks after Congress passed the treaty in the departure of many representatives of American enterprises for the islands, seeking business opportunities and alliances, and in the projects which will soon be realized by connecting Honolulu with California and with all the main islands of the group by ocean cables.

The brightest hopes attend this fortunate union, but there is one pathetic feature of it. Many of the native Hawaiians, sincerely attached to the old *régime* which the former queen represents, are unwilling sharers in the transformation. It is a dying race with

whom we have now come into responsible relations. It will be an enviable page in our history if we may so conserve their spirit and deal with their weakness that they may not meet the melancholy fate of extinction which has been the destiny of so many Pacific islanders.

It is not surprising that the Puerto Ricans generally have welcomed us and witnessed the disappearance of the Spanish flag without regret. The abrogation of reciprocal relations between the United States and Spain unsettled business in the island. Its trade with our country for several years has been only about two thirds its usual volume. It is a thoroughly tropical land, though more healthful than Cuba, for it lies out to sea and is not so invested by the influences of the warm currents. The Yankee is reputed to be able to turn his hand to anything, and there is no doubt he will take hold of Puerto Rico with perfect confidence that he can make the most of her capabilities. Tropical hygiene will have to advance still further before he will desire to live there the year round. But the island is populous as it is, and fairly prosperous also, for Spain did not saddle her with the stifling taxation and prohibitive duties which did so much to kill enterprise in Cuba and the Philippines.

It is naturally a rich little island, with a rather more enterprising people than the dwellers in the tropics usually are. There is no doubt that the Anglo-Saxon element in their affairs will be most helpful. The world will look on with curiosity and interest to see how we deal with tropical conditions, and will observe whether or not we diffuse education and advance the standard of living and comfort. Americans will not underestimate the responsibilities and the weighty problems which our new colonies, and particularly the Philippines, will impose upon their government. But they do not believe that the United States will prove inept, unjust, narrow, or unwise in its dealings with the millions who have come into our fold. We shall be a sadly disappointed nation if the new era that has dawned upon these widely severed regions does not bring them greater peace, comfort, and progress than they have ever known before.

THE HARBOR OF HONOLULU.

THE MISTAKE OF HIS LIFE.

AN ANGLO-AMERICAN ROMANCE.

BY ELSEY HAY.

CHAPTER XVII.

HELP FROM THE DEAD.

DIANA was roused from her trance of despair by a suppressed groan at her side, and as she started up and began to feel about her in the darkness her fingers came in contact with the fettered hands of her husband, swollen and lifeless, from the cruel pressure of the cords that bound them.

"Max, Max—Mr. Brevard," she cried, "what can I do for you? Let me try to help you!"

"There is nothing you can do, my poor Diana," he answered, in a voice hoarse with pain, "unless your hands were strong enough to break these cords that are torturing me."

He had called her by name, he had spoken with kindness, almost with tenderness, and she felt that if those fetters had only bound her she could burst them with her heart-throbs. Suddenly she remembered the scissors, and a cry of joy broke from her lips as she put her hand to her head and felt the precious implement safely ensconced there in the soft, thick folds of her hair.

"Thank heaven! they didn't find my scissors," she cried, "and I can—I can relieve you."

He did not reject her aid now, and the thought was heaven to Diana. She tenderly lifted his head from the slimy floor of the pit and rested it on her knee, while she felt in the dark for the cords that bound his arms. It was slow work, sawing through hempen rope with a pair of cambric scissors, and Diana had to be guided entirely by touch. But love and patience are strong forces, and in less time than one would think Max's hands were free. They were cold as marble, and so numb and swollen that he could scarcely move them at first, but she chafed them gently with her own till life and warmth returned. The relief was so great that in his joy at finding himself free once more he almost forgot the horror of their situation. Intense physical pain had rendered him, for the time being, oblivious of everything else, so that now the contrast with his former sufferings seemed like positive bliss. The touch of Diana's fingers was as the touch of an angel, and he resigned himself to her gentle ministrations, almost afraid to move or speak lest the blessed presence should vanish. But it was impossible to feel the touch of those soft hands long without making some response, and with a sudden impulse, seizing them in both his own, he pressed them tenderly to his lips and said,

"I wish I had the power, Diana, to repay all that I owe to these blessed hands of yours."

He meant far more than he said, and if she could have seen his face she would have understood him, but the words were ill chosen, as is apt to be the case when we are afraid to say just what we mean, and they conveyed to her sensitive heart, so often wounded, so often repulsed, only the idea of a delicately expressed regret that he had nothing more than gratitude to offer. She waited without making any response till Max, disappointed and self-condemned, slowly released her hands. He could not blame her; she was but giving him his deserts, he said to himself with a sigh, and so, restraining the impulse of his heart, he held his peace and gave his attention to assisting her, as well as he could, in untangling the network of cords that still encumbered his person. And before long, released from the last of his fetters, he rose like a giant in his strength and shook his powerful limbs with a glorious sense of freedom that a few hours

before he would not have believed possible to a man pent up in the bowels of the earth. With the use of his limbs, he felt the love of life revive within him and the natural vigor of his temperament began to assert itself in an indomitable hopefulness.

"There is no need to despair yet, Diana," he said, in a cheerful voice, as he felt her crouching in the dark at his feet. "Our situation, desperate as it seems, is not utterly without hope," he continued, kneeling on the ground beside her. "Our absence must soon excite suspicion, search will be made, and unless there should come a rain in the meantime to obliterate our traces, it may be possible, with good dogs, to track us even here."

"I had thought of that myself," exclaimed Diana, elated at finding the vague hope upon which she had been acting indorsed by Max's sober judgment, "and I have taken care to leave a clue behind, by dropping in our pathway, as we came along, every article I could loosen from my person without being detected. If they had not made way with poor Carlo, he would find us before morning."

"Now heaven be praised!" cried Max, starting up again with a bound. "Your words have put new life into me—provided the rascals don't discover your landmarks," he added in a subdued tone, "and gather them up as they return."

"They can hardly do that," answered Diana reassuringly, "for I left too many, and besides, most of them were objects too small to attract their attention."

She then gave a detailed account of her maneuvers, from the shred of her riding habit that she had left fluttering among the brushwood on the mountain side to the frail guiding line she had stretched from the river, and ended with a minute description of the turtle-shaped stone under which she had cast the spool. Max listened with breathless attention. A plan had been rapidly shaping itself in his mind while she spoke, and every word that she uttered seemed to add new life to the hope that was rising within him.

"You have done nobly," he said, feeling his heart glow with admiration. "And now, since your coolness and foresight have paved the way for our escape, let us try what our united efforts can do toward accomplishing it."

The hope seemed almost too wild to be entertained, but Max's courage and energy were infectious, and she was ready to try even the impossible if he proposed it.

"If we were only out of this horrible pit," she answered, wringing her hands, "there might be some hope, but as it is, what can we do?"

"Our enemies have supplied the means," replied Max, feeling for the ropes that had bound him. "This," throwing the cord into her lap, "will furnish tow, the stones under our feet will yield a spark to light it, and if we can once succeed in getting out of this hole and making our way to the river we shall increase our chances of being discovered by that much, and shall at least not have to dread the horrors of dying from thirst. Moreover, I am a good swimmer, and if our light will only hold out long enough, I can cross over for the boat, and then, after rowing you over, knock the old hulk to pieces and use it for torches with which to grope our way further."

Diana listened eagerly to his words. The project seemed not altogether impracticable if they could only get out of the pit, but that feat she saw no way of accomplishing by their own unaided endeavors.

"If you have the strength and courage to help me," replied Max, in answer to her misgivings—"and I know that you have the courage for anything—I do not despair of accomplishing even such an apparent impossibility as that."

His strong, energetic nature could not remain passive, and the mere prospect of exertion gave back tone and elasticity to his spirits.

"I was not so nearly dead when those villains let me down here," he continued, with growing animation, "but that I could see the pit was not more than twelve or fourteen feet deep. Now, I am six feet two in my boots, and you are —"

"Five feet five," interposed Diana eagerly. She was beginning to see his drift now, and listened with bated breath as he went on.

"That will give us an aggregate height of eleven feet, seven inches. You are active, I am strong; I can take you on my shoulders, and then, by placing my hands under your feet and stretching my arms to their utmost, lift you twelve or fourteen inches above my head. If you can thus manage to reach the top and extricate yourself, this rope may serve me as a means for getting out, as well as for getting in. Do you think my plan worth trying?"

"I do," she cried eagerly, her hopeful nature drawing inspiration from his words. "Let us go to work at once."

"With all my heart," he answered, "but our first step must be to strike a light, and that will be no easy matter; do you unravel a bit of rope while I try my hand at the primitive art of striking fire."

The bottom of the pit was strewn with stones, but getting fire from them was another matter, and it was two hours or more before Max succeeded in igniting his tinder. In the meantime, Diana, in order not to waste their precious time, had tucked up her skirts to the knee, girded round her waist one end of the long rope by which Max was to climb up, and stood ready equipped for her part of the adventure.

At first, the dim, uncertain light of their flickering taper served only to render the horrors of their situation more apparent. The walls of the pit rose sheer and unbroken from top to bottom, with no outlet save through the narrow circle of darkness overhead that marked its mouth. On the floor, close against the foot of the wall, as if crouching there in terror, gleamed a white object, dimly discerned by the faint light from above as the prisoners were swung down into their loathsome cell, now clearly revealed to be what their imagination had shrunk from picturing, the ghastly remains of their unfortunate predecessor in this awful dungeon. The sight was a fearful augury of what their own state might be erelong. Diana turned away with a shudder, but Max, after a hurried scrutiny of the encircling walls, coolly approached the ghastly heap and drew from it the long thigh-bones. Diana uttered a cry of horror.

"In the name of heaven, what are you doing?"

Max struck the melancholy relics against a stone to test their strength, and then laid them reverently at his feet.

"If we ever get out of this place," he said, looking up at the steep walls that encompassed them, "it will be by the help of poor Tanner's legs, and he would not grudge us the use of them, I fancy, in such a strait. If we escape we will show our gratitude by giving these poor bones decent burial. But we've no time to talk about that now; our little bit of tow is wasting and every moment may mean life or death."

He selected the spot where the wall seemed roughest, so that Diana's feet would be less liable to slip, and placing two flattish stones against it to eke out his own height he dropped upon one knee and invited her to mount upon his shoulder. She performed this first step with an agility that augured well for the success of her undertaking, and while thus held aloft dug out, by his direction, with the help of her scissors, pockets at intervals in the wall for their feet to rest in as they climbed. But when he had raised her on his uplifted arms to their utmost height it was found that she could not much more than reach the upper rim of the pit with her hands. Now was the critical moment, and Max was prepared for it. Seizing poor Tanner's leg-bones and thrusting them under the soles of her feet, he raised himself on tiptoe and pushed with all his might till he had heaved her, head and shoulders, above their prison wall.

Diana threw herself forward at the same moment with all her strength, and digging her fingers into the earth, after a short but desperate struggle succeeded in drawing her body up until she rested it upon the floor of the cavern. She could hardly realize that what had seemed so desperate an undertaking was actually accomplished, and sat upon the ground panting and dazed at her own success. As soon as she could

collect her thoughts after the first shock of joyous surprise she was on her feet again working for Max's deliverance. He first tied his coat and boots, which he had taken off while she was undoing her hempen girdle, to the lower end of the line, and when she had drawn them up and lowered the line again, carefully attached to it their precious bit of lighted tow, with his watch chain, so that it could be taken up without danger of burning their rope. Diana's next step was to seek, by the aid of this light, a point of attachment for her rope strong enough to sustain the weight of Max's body. By tearing her petticoat into strips to increase its length, she succeeded, after some difficulty, in attaching her line to a projection of one of the huge boulders that lay around the mouth of the shaft, and when Max had sufficiently tested its strength by pulling on the other end with all his might, he began slowly to ascend, hand over hand on the rope, while his feet rested in the pockets that Diana had dug. As he looked up and saw her standing there with the dim taper in her hand, offering him light and help and hope, he thought of the legends of angels he had heard in his childhood, and ceased to wonder that in moments of pain or sorrow the grateful credulity of man should invest the form of his deliverer with attributes almost divine.

Diana looked on with bated breath as he began his perilous ascent. He was a large, powerful man, and it was no easy task to drag his own weight by sheer strength of arm up to the top of the wall, but the athletic training that English boys acquire at school stood him in good stead now, and when, in less time almost than it takes to tell the story, he had made good his endeavor and stood upon the broad floor of the cavern by Diana's side they both felt, in the joy and triumph of their first success, that deliverance was already assured.

CHAPTER XVIII.

AT THE RIVER.

BUT though the most difficult part of their undertaking had been accomplished, by far the largest part still remained. With miles of underground waste to be traversed and only a few yards of rope to light them, there was not a moment to lose, so leaving the pit to its silent occupant, the fugitives turned away and began looking eagerly for some clue by which to guide their steps. The soil was so hard and stony that it was not easy, with the dim light at their command, to detect any mark of footprints, but a half-consumed ashwood torch that they found lying on the ground a few paces from the pit's mouth decided them to proceed in that direction. It had doubtless been cast aside by the ruffians on their return, and was a veritable boon to the captives. Their supply of rope was more than half consumed already, and but for this timely find their efforts for their own deliverance must soon have come to an end. With Diana's scissors for a chisel and a stone for a mallet, Max split the clumsy billet into a number of fine splinters that could be easily ignited, and, thus provided, they went slowly forward, cautiously scanning every object around them. Suddenly Diana uttered a cry of joy; she had sighted the turtle-shaped stone where she left her spool, and recognized it just in time to keep them from wandering off in the wrong direction. A careful search brought to light the empty bobbin with its precious clue attached, and now their way as far as the river seemed clear.

They went on rapidly and confidently for a hundred paces or more, when their guiding line suddenly came to an end. It was only a frail piece of spool cotton and must have got entangled in the feet of some of the murderers as they were retracing their steps, and broken off. It would be a hopeless waste of time to try to find the other end, yet they dared not proceed without it, lest they should wander out of their way and lose the advantage already gained.

"At all events, the river can't be far off," said Diana, as they stood consulting what to do, "for there are just two hundred yards of thread on a spool, and we must have come more than half that distance since we found the clue."

"Was this a full spool?" asked Max.

"Very nearly; there had been, perhaps, some eight or ten yards used from it."

"Then let us see," he continued, taking the broken thread from her hand, and measuring it roughly on his arm. "There are about ninety-eight yards here," he went on, when he had finished, "and suppose ten to have been used, making a hundred and eight in all, there will remain about ninety-two yards as our distance from the stream. Now, we are certainly in the right path thus far, so one of us had better stand here as a guide-post, to secure the advantage already gained, while the other goes forward a little way to explore; are you afraid to stay?"

"No," she answered courageously, handing him the light that he had given her to hold while measuring the string, though she could not help feeling a little nervous at the idea of being left there in the dark alone.

"You need not feel uneasy, for I will not go beyond the reach of your voice," he continued, as if reading her thoughts. "One of my paces measures, say about two feet, making something like a hundred and forty from here to the river, if my first estimate was correct. I will count my steps as I go, and if I do not come to running water within at least a hundred and fifty paces from here, I will return and take a fresh start. When you hear me call, answer, so that the sound of your voice will guide me. If I give two whoops, you may know that all is well; if one, I have mistaken my route and must come back for a fresh start."

The event proved the correctness of his calculations, for after an absence of hardly more than five minutes, two shouts of triumph conveyed to Diana the joyous news that he had found his way to the river. He was soon back at her side, and they went on their way rejoicing. On arriving at the river bank the presence of fresh footsteps in the moist sand assured them that they were still on the right track, and on examining the stone upon which she had rested the day before, Diana even found the end of thread she had fastened there still adhering where she left it.

In the meantime, Max plunged in and struck out boldly for the opposite shore. The stream was seventy or eighty feet wide, and as their feeble light hardly reached so far, they could not tell until he had crossed whether or not the boat was there. Diana listened anxiously for the sound of returning oars, but after minutes of suspense that seemed to her like hours she saw Max returning as he had gone, by his own strength of arm. It was the first serious disappointment they had met with. Their last piece of torchwood, too, was more than half consumed, and unless they could get over before it gave out, there would be no hope of crossing at all.

"The boat may be there after all," said Max, hastily reviewing the situation. "I could not half look for it in the dark, and we may find it drifted down the stream if we can only reach the other shore with our light unextinguished. We must try, at all hazards, for if we remain here we give up everything but the forlorn hope of succor from without. You can do almost everything, do you know how to swim?"

Diana shook her head.

"Then you must trust yourself to me."

That would have been the sweetest thing in life to Diana, yet, for the first time, she hesitated.

"What, you are not afraid?" he said persuasively.

"No, not afraid," she answered promptly, "but you must not endanger your safety by such an encumbrance. I can wait here while you go forward alone, and if——"

"Not a word of that," said Max, with gentle sternness. "Either I take you with me, or I do not stir from this spot, for come what may, I will not leave you. And there really is not the smallest danger," he added encouragingly, "if you do not become alarmed and will follow my directions implicitly. Our chief cause for anxiety is about our light, for if it should be put out, I might not be able to find my way to the shore again; but we will guard against such a contingency the best we can."

So saying, he took off his hat, cut a hole in the crown, and slipped the unlighted end of the torch through far enough for a hand to grasp it on the outside, while the brim

spread around the lighted end like a bowl, effectually protecting it against the water.

"Now I commit our safety to your keeping," he said, placing this novel lantern in Diana's hand. "Hold the light well above the water, and for the rest take no thought; the more passive you remain, the better. Don't try to help yourself or me; don't make an effort of any sort, and, above all, don't touch my arms, but just trust yourself for a little while implicitly to my hands."

To do that seemed so easy that she felt no fear as the dark water closed around her up to the neck. Max had left his coat and boots on the other side when he crossed over the first time, and thus unencumbered stepped in first, ready to receive her. The banks were steep, and she would have sunk over her head at the first plunge if he had not caught her by the collar as lightly as if she had been a feather, and immediately beat out with swift, powerful strokes for the opposite shore. Diana guarded the light with a careful, steady hand, and the confidence and courage with which she yielded herself to his guidance made her so little of a hindrance to him that with hardly more effort than it would have cost him to swim across alone, he landed her safe on the other side.

They shook the water from their dripping garments, and then Diana held aloft the fast waning torch while both looked around in vain for the boat; not a vestige of it was to be seen. Weary and exhausted as they were, they followed down the bank, in the hope that it might have drifted away, and soon came to the end of the chamber, where the stream disappeared under a low, arched opening in the wall. At the side of the opening, on either shore, lay a mass of *débris* lodged there by the waves when the waters were high, and amid the rubbish, half concealed by drifted gravel and fragments of rock, Max's eagle glance detected what seemed to be the broken handle of an oar. He seized hold of it eagerly, and dragging it from its hiding-place, found, to his infinite joy, that the blade, a broad slat of rich Georgia pine, was still intact. It had probably been lodged there by some winter freshet long ago, for it was thoroughly dry, and would burn like tinder when lighted.

"Now we are safe," he cried, brandishing the long shaft above his head with boyish glee, "here is wood enough to light us for miles."

With the help of Diana's scissors and a couple of sharp stones he succeeded in splitting it up as he had done the ashwood torch, and then, not daring to sit still in their wet clothing, even if they could have risked spending their precious torchlight in idle rest, the weary wanderers set forth once more, with renewed hope and courage, upon their toilsome journey.

CHAPTER XIX.

LIGHT.

THOUGH the greatest difficulties that had confronted them were now successfully overcome, there still remained a perilous expanse of darkness to be traversed, whose dangers, if less imminent, were none the less real than those from which the tired wanderers had escaped. They were obliged to proceed slowly and cautiously, tracing their path now by dimly discerned footprints, now by the happy discovery of some clue that Diana had dropped, then by vaguely remembered objects they had passed on their terrible death march the day before; and finally, when all other resources failed, by the same method of cautious exploration they had employed in finding the river. Their wet garments hung about them heavy and chill, making every movement an effort, and now that the excitement which had buoyed them up began to subside, in the absence of any immediate danger, they were becoming painfully conscious of both fatigue and hunger. At last, after wandering for hours, they saw a faint gleam of light shimmering in the distance, like a pale, white star, giving them the joyous assurance that their goal was reached at last. They pressed eagerly forward and looked out, with delighted eyes, upon the blessed daylight they had never expected to behold again. A hard rain had fallen in the night, obliterating their tracks and rendering futile any attempt to trace them with dogs.

Max looked at his watch; it was half past three in the afternoon.

"We must wait here until dusk," he said, stepping back into the open chamber of the cavern. "It would not do to risk another encounter with our enemies by venturing forth in the daylight. You are very tired, too," he continued, looking at her with tender anxiety, "and the rest will do you no harm, for we have still a long and difficult way to go before we can hope to reach a place of safety."

He led her back as he spoke into a sheltered recess a little way from the entrance, for he felt that after their recent experience discretion was still the better part of valor. He found a flat stone against the wall of this alcove that made a tolerably comfortable seat, and there, safely hidden from the view of any possible intruder, the weary pair sat down to wait for the friendly darkness of night. Now that the necessity for exertion was removed, Diana could realize how faint and exhausted she was, and sank down upon the stone with a feeling of utter lassitude. Max placed his coat under her head, and upon this improvised pillow she soon fell asleep. It seemed to him now, as he bent over that hard couch and gazed at her unconscious features, as if the face he had once so despised shone with a celestial beauty, and he felt a passionate impulse to stoop and kiss the lips whose lightest utterance he had learned to prize above fairy gifts of pearls and diamonds. But a chivalrous sense of honor restrained him. Though the woman there was his wife, he felt that he had forfeited all a husband's claims and had no right to touch her. And could he hope ever to win back that right? Could a woman wronged and outraged as she had been ever forgive?

Just then Diana roused up with a little start. "Did you hear it?" she whispered, looking wildly about her.

Instead of answering, Max pressed his fingers hastily over her lips and pointed to the gleam of light that stole in from the mouth of the cave. Even while she was speaking a shadow had fallen across it, and the stealthy footsteps that had aroused her overstrung nerves, whipped and goaded by hunger and fatigue into abnormal sensitiveness, even in sleep, were heard advancing through the narrow opening. The entrance, it will be remembered, was through a short gallery, so low and narrow that the intruders could advance but one at a time, and hence only their shadow could be seen from the recess where Max and Diana were concealed. While they sat holding their breath in the presence of this new danger, they heard the coarse voice of Kid Harper saying to his companion:

"It was all a dern fool notion o' the old man's about leavin' o' them tickers an' things; therr ain't no danger o' gettin' caught ef we're only sharp enough. Therr's fellers in Chattynoogy that'll take whatever's brought 'em an' ask no questions. An' besides, the cat had money; I seen it myself, in his pocket, two big, round gold buttons as fat an' yaller as Nor' C'liny pippins."

So, then, the wretches were coming back to plunder them, and Max knew that if discovered now their doom would be swift and sure. Both the men carried guns; he could hear them ring as the butts struck against the narrow walls of the passage, while he was unarmed and at their mercy, for he felt that in his present state, weakened by fasting and severe fatigue of both mind and body, he would be no match for two, even if fully armed. He seized the first stone that came to hand and was deliberating whether he should try the desperate expedient of attempting to brain the villains separately as they emerged one by one from the narrow passage, when his doubts were set at rest by Kid's companion, who stepped from the gallery at that instant, and resting his gun against the wall of the chamber, almost within reach of Max's hand, said:

"I reckon we mought 'z well leave our guns heer; therr ain't nobody to trouble 'em, an' 'twon't be no use a-totin' of 'em way back yonder, an' we got to swim the river, too, you know; the ole boat wint to pieces on our las' trip."

Kid assented, and the two rogues, little dreaming what a valuable present they were making their intended victims, stacked their guns almost under Max's nose, and lighting a small lantern they had brought with them, each took a long pull at a black bottle Kid carried in his pocket, stuck their pipes into their mouths, and proceeded on their way.

"Now's our chance," whispered Max, creeping from their covert and seizing the guns as soon as the last glimmer of the lantern had died away in the distance. "We can't get away from here too soon, for there is no telling how many others may be coming on the same errand."

The sun, though still lighting up the mountain tops, had left the valley in such deep shadow that Max felt safe in venturing forth. He drew the load from one of the guns, put it into his pocket as a reserve in case of need, broke off the trigger, and threw the weapon into a ravine where it would not easily be found again; then, laying the other across his shoulder, he started off hopefully on the last stage of their perilous adventure.

After retracing their steps a short distance over the same path by which they had come the day before, Max turned abruptly aside into a hidden trail leading almost sheer up the mountain. He had followed it once, in hunting deer, and remembered that it led into a tolerably fair path on the opposite slope, which would take them to the main road much more quickly and safely than the route by which they had descended. They made their way as rapidly as possible over the top of the gorge and down into the valley on the other side, but the growing darkness made it more difficult at every step to keep in the right path. It seemed to Diana as if her feet were of lead, they felt so heavy and lifeless, but she would not complain, for she knew that Max must be weary too, and she did not wish to add to his burdens by increasing the anxiety he felt already on her account.

His solicitude for her was touching. Hungry and footsore as he was, he would have picked her up in his arms and lifted her bodily over all the rough places if she had permitted it. His manner was so thoughtful and tender that she hardly knew what to make of it, and there was something in his voice when he spoke to her that she had never heard there before, something that made her heart leap with joy at every word, and seemed to give springs to her flagging feet as she moved along at his side.

But as they left the scene of danger further and further behind, and the need for exertion became less pressing, Diana grew more sensible of her exhaustion, and though she made no complaint, Max's watchful eye saw that she could scarcely drag herself along. When at last they reached the point where their path opened into the main road, Max, feeling that there was now no longer anything to fear from the moonshiners, threw away his gun and gave his whole attention to Diana.

"You must let me help you," he said, passing his arm round her waist and almost lifting her from the ground, while, too weary to resist, she passively yielded herself to his guidance. He was very tired himself, but it seemed to him as if he gathered strength from contact with his precious burden and walked more firmly for the support he gave to her.

"We shall soon reach shelter now," he whispered cheeringly, bending so low that his lips almost touched her hair. "It is not far to the mill, and there we shall find rest and safety."

In fact, even while he was speaking, the gleam of a lantern flashed across the road, and a party of men on horseback came rapidly toward them. Presently there was a great shout, and Max recognized the voice of his trusty foreman. But to Diana all was confusion; her head reeled, her steps tottered, and she would have fallen to the ground but for the strong arms that clasped her in a frantic embrace.

"Oh, Di, my wife, my darling, speak to me just one word; say you forgive me! Don't leave me Di, oh, don't leave me, darling, till I have had some chance to atone for the past!"

She heard her husband's voice, frantic with remorse and despair, ringing in her ears. She opened her eyes an instant as the light of a lantern flashed upon them and she saw Max's face bending over her with its look of unutterable love; she heard his imploring words and felt his burning kisses on her lips as in a dream. She smiled and raised her hand to stroke his cheek; it seemed to her that she must have died and gone to heaven, and then all was blank.

When Diana came to herself again she was lying on a bed in the miller's cottage with Max still bending over her, his face full of tender love and her hand in his. She had been taken to the mill by the rescue party and left there till her carriage could be sent down from Olequa. She started up and looked round her with a bewildered air, but Max forced her head gently back on the pillow, while some one whom she recognized afterward as the village doctor handed him a glass which he placed to her lips. She swallowed a few mouthfuls and then lay with closed eyes, contented and happy, her head resting on Max's arm.

"She's all right now," said the doctor, feeling her pulse. "She only needs a good rest and something to eat. It's rather late for supper," he added, looking at his watch, "but you must both eat a hearty one as soon as you get home; it is what you most need, and then, keep quiet for a few days."

Max followed him to the door, and when he had gone came back and, kneeling by the bedside, took both Diana's hands in his and said, in a voice husky with emotion,

"Diana, you once said—in reply to that bold letter of mine entreating you to cross the ocean with me—that I could never ask too much for the abundance of your love. Is it so, Di—even if I ask you to give me back the heart I once so madly rejected, and that I would now give my life to claim as mine again?"

"It has always been yours, Max," she said, freeing one of her hands from his clasp and laying it tenderly on his head. "Even when you were coldest and hardest to me, I worshiped you still, and though I had lost all hope of ever winning your affection, I never lost my faith in you. I knew always that you were brave and noble, and entirely worthy of my love, even though you would none of it."

"Di, you are heaping coals of fire on my head," he answered, while tears of manly repentance, of which there was no need to be ashamed, came into his eyes. "My sweet, patient, injured wife! when I think what a mad fool I have been, trampling under my feet the precious pearl that heaven had sent to be the joy and glory of my life, I feel that I have sinned past all forgiveness. But if you can still trust me, Di, you shall see how nobly I will make the future atone for the past."

"It is atoned already," she whispered, fixing upon him her eyes, all glorious with the light of a love there was now no need to conceal. "Into this one moment is gathered the happiness of a lifetime."

(The end.)

PRESIDENT McKINLEY AND THE WAR.

BY WILLIAM ELEROY CURTIS.

NO president since the time of Washington—not even Andrew Jackson himself—has ever exercised his constitutional functions as commander-in-chief of the army and navy so literally and consistently as William McKinley. He has been the directing genius of this war. No step of any importance has been taken without his careful reflection and his expressed approval, and he has spent several hours each day and several hours each night in the study and contemplation of the plans of campaign. He has received information, advice, and suggestions from

Secretaries Long and Alger and officers of the army and navy, particularly General Miles, General Corbin, and General Schofield (retired), and from the Naval War Board, which consists of Admiral Sicard, Captain Mahan, and Captain Crowninshield, and he has submitted all important questions of policy to his cabinet. But he has assumed the authority imposed upon him by the Constitution, and has taken upon himself responsibilities that even President Lincoln shrank from.

When the surrender of Santiago was demanded, General Toral, the Spanish commander, asked that he and his troops might be allowed to evacuate the city with their arms and flags and be given one day's march in advance of their pursuers. General Shafter, General Wheeler, and several other of the general officers at Santiago joined in a recommendation that this proposition be accepted, but the president insisted upon unconditional surrender. About the time General Miles reached Santiago, Toral made a second proposition, offering to surrender if he was allowed to keep his flags and arms and retire from his fortifications with the honors of war, which would have been an evacuation rather than a surrender of the city. Again Shafter and his generals recommended its acceptance, and General Miles joined with them, entering into a long argument by cable to demonstrate the advantage of such an arrangement. He declared that Santiago could not be taken by assault without the sacrifice of thousands of lives, and that it was not likely to surrender very soon, because the archbishop had informed him that the troops were in good condition and had abundant food, while most of the non-combatants had left the city and were now a burden upon the Americans instead of the Spanish commanders. He represented at the same time the distressing condition of our troops in their trenches, which were filled with water, the difficulty of transporting food to them, the danger from yellow fever and other diseases, and the impossibility of improving the condition or protecting the health of the men.

The president called his cabinet together and laid General Miles' despatches before them. He admitted the desperate situation of our troops, General Shafter's army, and the horrors of yellow fever, but argued that to allow General Toral to evacuate the city would be simply to transfer the seat of war to another location in the interior of the island, which would be even more inaccessible for supplies and might be much more unhealthful for the men, while they could not have the support and co-operation of the navy. Furthermore, he believed that if the United States accepted the propositions of General Toral the moral effect upon the powers of Europe would be greatly to the disadvantage of this country, and that it would stimulate the war spirit in Spain to such a degree that the struggle would be indefinitely prolonged. He believed that the Spanish garrison in Santiago was in extremities, and that General Toral intended to surrender and was only playing for better terms. He therefore decided to reject the recommendation of Generals Miles, Shafter, and their associates and instructed them to demand the unconditional and immediate surrender of Santiago. If any conditions were granted it would be an act of generosity on the part of the United States and not an inducement for surrender. Subsequent events demonstrated the wisdom and sagacity of the president's course and proved him a better military man than his generals.

Shortly after the beginning of the war the long, narrow room at the southeast corner of the second story of the White House, which has always been occupied by the secretary or the executive clerk of the president, was cleared of its furniture and fitted up as a war study. The walls were decorated with military maps of Cuba, Puerto Rico, the Philippine Islands, and the Spanish peninsula; the book-shelves were filled with gazetteers and other works of reference that contained information about the armies and navies and the colonies of Spain and quite a collection of books on military and naval science, while a telegraph instrument was placed on a

table in the corner and connected with the Associated Press, the Western Union Telegraph and Cable Office, and the Army and Navy Departments. Mr. Montgomery, who has been the telegraph operator and index clerk at the White House for many years, was placed in charge. Every telegram of any general importance that was received from the army or navy, every newspaper bulletin, and the Associated Press despatches have been immediately sent to the president over this wire, and strung on spindles for his reference. The official and newspaper despatches are separately classified, and the latter subdivided according to the officers and places from which they came. All of Sampson's cablegrams are placed on one spindle, all of Dewey's on another, all of Shafter's on a third, and so on, so that the president could have a consecutive knowledge of the information received from these officers.

For hours every day and frequently long into the night the president has been engaged in studying these reports and dictating replies. Secretaries Long and Alger, General Corbin, and the members of the War Board have been with him almost every evening, giving him information and receiving his instructions. The Bureau of Intelligence in the Navy Department and the Bureau of Military Information in the War Department have kept men on special detail gathering facts and investigating questions for him, and the heads of the other bureaus, like the surgeon general, the quartermaster general, or the chief of the Bureau of Equipments and Supplies, have been subject to his call at any hour of the day or night to furnish information bearing upon matters under consideration. The War Board of the Navy Department has been at the White House frequently and from them the president has received very important information and advice. The reports of the naval *attachés* at the different embassies and legations in Europe have been briefed for his use, as well as the diplomatic correspondence bearing on the war that has been received at the State Department. No man in Washington or elsewhere has had so thorough a knowledge of the situation or has kept closer to events than the president. Secretary Alger, of course, has known everything that was going on in the War Department, and Secretary Long has been thoroughly posted as to the movements of the navy, but the president has been familiar with both.

The skill, the tact, and the sagacity he has shown have been remarkable. There are always differences of opinion and conflicts of purpose where men of strong convictions are engaged in the same work. A commendable rivalry that has always existed between the army and navy has developed into a decided jealousy during the present war, and the president has tried to take advantage of it for the benefit of all concerned. Between the general of the army and the secretary of war there has also been considerable friction and always will be as long as our army continues under its present organization. The president is commander-in-chief of the army and navy. The secretary of war is his representative and agent for the exercise of that power. Every act of his is supposed to be by the order of the president. The general of the army is the actual commander of the troops and is supposed to receive his orders from the president through the secretary of war. The latter is usually a civilian, but often one who has served in the volunteer army and from his experience has acquired some ideas on military science, which are usually rejected with contempt by the general of the army, who has always been and always will be a soldier. Sometimes, as was the case with General Scott and Secretary Cameron, General Halleck and Secretary Stanton, General Sherman and Secretary Belknap, this friction has developed into an open feud. General Sherman actually removed the headquarters of the army from Washington to St. Louis in order that he might not come into personal contact with Secretary Belknap.

The present war has offered several opportunities for similar friction between Secretary Alger and General Miles, both of

them being men of strong character and convictions, but the president with his sweet temper and irresistible tact has succeeded in making them work in harmony. Both General Miles and General Alger have had plans of campaign, and the president has been compelled to choose between them on several occasions. The original plan submitted by General Miles, indorsed by the cabinet and the Naval War Board and approved by the president, was based upon misinformation furnished by the members of the Junta and other Cubans with reference to the condition of affairs on that island, the disposition of the people, and the fighting strength of the insurgent armies. It was proposed to establish a basis of supplies at some convenient point on the north coast, guarded by a division of five or six thousand troops, from which arms, ammunition, food, clothing, and other supplies were to be distributed to Gomez and the other generals, so that they might do the fighting at our expense.

The friends of the insurgents claimed that if they could have equipments and food they could drive the Spaniards out of Cuba, and it was asserted that one hundred thousand able-bodied men were waiting for guns and hardtack from Uncle Sam in order that they might fight for freedom. A practical investigation by officers of the army who were sent from Washington to the camps of the insurgents exposed those misrepresentations, and General Miles was reluctantly compelled to abandon his plan because the Cubans were not to be depended upon even for assistance. Instead of wanting to fight they wanted to plunder, instead of guns they wanted bacon, and a sad experience has demonstrated that a Cuban patriot is not of much use in a struggle for liberty.

From the beginning the president has been determined not to expose our troops to the danger of fever and other diseases that prevail during the rainy season in Cuba. It was his plan, after that of General Miles had to be abandoned, to assemble the volunteers in camps of instruction at convenient points in the Southern States, where they could be equipped, drilled, and hardened for a vigorous campaign in Cuba at the close of the rainy season. The climate of Cuba is always very injurious and usually dangerous to people who are unacclimated, but the president believed that a summer spent under the hot sun at Tampa, Mobile, New Orleans, Jacksonville, or Chickamauga would season the volunteers from the cooler regions of the North so that they could endure a tropical climate without suffering, and in the meantime he proposed that the navy should maintain a blockade and keep up an occasional bombardment of the coast cities of Cuba so that the Spanish army would be starved out and exhausted by the time we were ready to make an invasion. That was his plan for the war. The siege of Santiago was accidental and was made necessary when Admiral Cervera found refuge there with his fleet. Although the climate of the eastern end of the island is less severe than that of the western provinces, the president was reluctant to expose our troops to its dangers and the loss of every man in battle or by fever has been to him a personal affliction.

The Watson expedition was suggested by Captain Mahan on the theory that it was necessary to bring the horrors of war under the personal observation and experience of the people and the ministry of Spain, and that proposition undoubtedly did more to bring the Spanish government to its knees than anything else that has happened.

General Miles has always been in favor of invading Puerto Rico, although he agreed with the president's views regarding the dangers of a campaign in Cuba during the summer season, and it was characteristic of the president to tell the commander of his troops that he might have the authority to carry out his own ideas in that direction without interference from anybody.

The story goes that when General Miles returned from Florida he made some severe criticisms of the management of the Santiago expedition and expressed the hope that they might be avoided if another was sent, whereupon, according to the gossips, who

know everything that happens, the president turned to Miles and said:

"General, you can make up the Puerto Rican expedition to suit yourself. You can have all the men and money and ships that you want. You can pick out your own troops and your own generals and staff officers and take all the time that is necessary for your preparations, but we will hold you personally responsible for the success of the expedition and expect that you will show us how such things ought to be done."

It should be said in this connection that the president has felt the deepest gratification at the manner in which the campaign in Puerto Rico has been conducted and has given General Miles full credit for its success.

The most perplexing duty of the whole war for President McKinley has been the appointment of officers in the volunteer army. He has been besieged and bullied, cajoled and entreated, by public men, politicians, and personal friends, and the applicants have numbered anywhere from ten to a hundred for every honor in his gift. He has appointed very few political generals, for he has believed that the responsibility of command should be entrusted only to those who have had experience and training, and of those Ames, Lee, Wheeler, Butler, and Wilson were graduates at West Point Military Academy, and served for some time in the regular army. The minor officers have been appointed so far as possible in proper proportion among the states, and the president has endeavored to select well-educated and ambitious young men, on the theory that war is a good school to develop the character and strengthen manhood. He has felt that this struggle with Spain has offered an opportunity for the education of a generation of soldiers whose services might be necessary in some more serious conflict in the future. He had the same idea in his mind when he authorized General Wade to take an expedition to Puerto Rico after Spain had practically accepted the terms of peace. Every officer and man in the volunteer army was anxious to do active service and camp in the enemy's country, and the president was anxious to have them. He felt that as a matter of experience and education it was worth all it would cost, and therefore that there was no danger to the health of the troops who had been partially seasoned, because the climate of Puerto Rico is not so treacherous as that of Cuba and the men were pretty well seasoned.

From the beginning the president has taken a personal interest in everything that affects the soldiers, and one of the most remarkable and interesting incidents of the war was a Sunday dinner at which four young men in the uniform of privates sat down at the table in the White House with their commander-in-chief, the ruler of the greatest nation on earth. Such a thing could not have occurred in any other country.

President McKinley has taken the same active personal interest in the negotiations for peace that he has shown in the direction of military and naval affairs. Every telegram, every memorandum of instructions has been either dictated by him or prepared under his immediate direction, although as usual he has submitted questions of importance to the gentlemen of his cabinet. He also prepared the instructions for the peace commissioners, and the disposition of the Philippines, which is the difficult problem, will be decided by him personally and represent his views, although in this matter, as in every other, he has great respect for public sentiment.

SUBMERGED SHIPS AND THEIR SALVAGE.

BY FRED HOOD.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE GERMAN "UEBER LAND UND MEER."

THE history of the navigation of all nations abounds in frightful catastrophes, which have sent large vessels, with their entire crew and most of the precious cargo, to their graves in the chilly deep.

With the gradual improvement in the art of ship-building, with the increasing knowledge of the ocean and ocean currents, of the wind and its direction and duration, accidents have decreased in number; the introduction of steam as the motive power of ships brings to navigation a comparative degree of security. This achievement was very soon brought into question, for the last three decades of our century have brought a rapid increase of navigation, and with it, in like increasing proportion, a multiplication of accidents, the like of which has never been known up to this time.

We first meet attempts at rescue work at the close of the sixteenth century and those among the Dutch, who busied themselves in bringing to light again the ships of the Spanish Armada, stranded and sunk along their flat coasts. The experiment on but a single one of these ships succeeded, so limited were the scientific means of help applied to them.

Further attempts at rescue on a large scale were undertaken under the first Napoleon and at the entrance of the Spanish harbor Cartagena. It was said that two Spanish galleons laden with bars of silver and gold had been sunk there at the beginning of the sixteenth century. Napoleon, who, as we know, could scarcely possess enough gold, had the bottom of the sea searched by divers at the designated point and they discovered the wrecks of two ships. The emperor commanded that the valuable contents should be removed and brought up, but that was easier said than done; in their bulky bells the divers were unable to penetrate into the interior of the wrecks and just as little were they able to blow up the ships. Napoleon then ordered the wrecks to be raised bodily. Immense chains were fastened to them and drawn over rollers from ship to ship up to the land, where they were pulled by a long line of mules and horses hitched together. But whether the work was awkwardly conducted or whether the strength of the animals was not sufficient to pull up the heavy load, the attempt was abandoned.

The gold and silver treasure remained quietly in the bottom of the sea until many years later, when the Spanish government took the matter in hand, and, the diver's equipment having been greatly improved by the introduction of the diver's helmet, the effort was successful.

However, an impetus was once for all given to such labor, and since, as already mentioned, the number of accidents increased with the annually increasing commerce, the time seemed at hand for the commercial spirit to seize the opportunity for making pecuniary gain.

A further stimulus proceeded from the United States of America, on whose coasts, in the course of the War of Secession, several ships were either stranded or sunk. Then several companies were formed in the cities on the Atlantic coast for the declared purpose of rescuing sunken ships. All except one of the companies dissolved with the end of the war, and that one still exists and has its office in New York. In the meantime the business was also taken up in Europe, and gradually companies were formed which to-day are active and very prosperous.

The first and most important of the above-mentioned companies is a German one, *Der Nordische Bergungsverein*, the Northern Salvage Union, which is located

in Hamburg. It has an immense shipyard at its disposal and sends its ships into every sea. Three of its larger ships remain alternately at the various stations in the Mediterranean and Black Seas. The largest one carries between four and seven hundred register tons; and the engines, being from seven hundred to one thousand horse-power, are very strong. Besides these, this company owns four large dredging boats, which are used for the usual dredging service on the North Sea and on the Elbe, but whenever occasion demands they are also used in the rescue business.

The second company, the "Em. Z. Switzers Salvage Company," has its office in Copenhagen, and makes use of ten vessels, which are inferior to those of the German company in size and capacity, in which they do not exceed four hundred tons. The usual working field of this company is the Eastern Sea, yet their vessels, if necessity requires, are also sent into the North Sea and into the canal.

A third company is located in Stockholm. It owns a number of very large ships, which work on the Swedish coasts, and occasionally in the Mediterranean Sea.

A fourth company is the Liverpool Salvage Association. The most powerful salvage ship of this company, which has won a certain amount of renown, is called *The Ranger*. Its name is well-known in foreign seas, as well as on the coast of England.

That these ships must possess especially strong engines has already been stated. In addition to this they are equipped with powerful pumps, both stationary and portable. The crew of the ship, according to its size, consists of from twenty to thirty men.

Proceeding now to the work itself, we notice that if the sunken ship lies more than fifteen meters under the surface of the water the possibility of rescue appears very doubtful, as the pressure of the water, flowing over the wreck, is so powerful that the sides are pressed in, in which case the wreck is worthless. If the wreck lies less than fifteen meters under the surface of the water, then the divers first calk the leaks and close all openings as well as possible, except one through which a tube is conducted from the pump on board the salvage ship. Through this tube all the water found in the room is first pumped up, and then through a second tube as much air is driven into the wreck as is necessary to move it and force it to the surface of the water.

Whenever it is not possible to make the submerged wreck air-tight, or in case it has been sunk in a river or canal or on a very quiet coast, then wire ropes or chains are used for raising it. They are let down into the deep from the prams lying over the wreck, drawn down under the keel of the sunken ship by the divers, and hoisted on the other side, so that both ends of the ropes or chains lie around the windlasses which connect with the engine, on the prams. In this way the connection between both the lifting prams are made and the interior of the wreck pumped out, so while the ropes or chains are being wound on the windlasses, the wreck is raised inch by inch. If it is considered that such a chain is nearly twenty-four centimeters in diameter, and that in raising a wreck from four to eight must be employed, then it is easily estimated how great is the weight brought up and also what expense of time and labor the rescue requires.

If the wreck is once raised to the surface of the water and the leaks have been carefully stopped up, then it is supported by the water and can be easily towed by one of the ships to the nearest dock. But if a ship has been overturned before or while it is sinking, the work of righting it adds to that of raising it and it is usually necessary to break off the masts or to saw them off before hoisting it. The righting proceeds for the most part in this way: The upper part of the wreck is bound by chains or ropes to one of the two lifting prams lying along side. The under part, the keel, is bound to the other pram, then both prams, each at its own side, pull the ropes. The wreck gradually rights itself and is finally brought into its natural position, as the opposition of the water is overcome.

That the salvage ship brings up not only

the entire vessel but also separate parts of the same, as pieces of the rigging, etc., is well understood. The rescue of dead bodies is also conducted by them.

In both works the principal part remains to the diver. How difficult and how dangerous the work of the diver is, a landsman who knows the sea and its tricks only by name, can scarcely form an idea.

The diver who has descended to a wreck, lying twenty meters under the surface of the water, has, if we consider the superficial area of his body a square meter, to endure the pressure of about eighteen and five tenths cubic meters of water on his head and shoulders. To that must be added a side pressure which is exerted by the water above him. Therefore the man is in reality squeezed down by this immense pressure, which, were it not for the helmet covering his head, would make his eyes start from the sockets. However, in spite of the helmet, the pressure is so powerful that everything around him appears red. A diver rarely remains longer than twenty minutes in a considerable depth of water. But this is only the beginning; the difficulties are yet to come.

Now there the man stands, "deep under the sound of human speech, and alone in frightful isolation." He takes into consideration the wreck lying on its side and goes around it to discover the hatchway which enables him to enter the interior. The going, or, more correctly speaking, wading, with the heavy lead soles on his feet is not easy, but it must be done; he has a sacred and earnest duty to perform. If the raising of the wreck is not possible, at least the corpses found there must be rescued.

He has reached the hatchway, but he is not able to open it; the pressure of the water is too great. He must resort to means of explosion, which he fortunately carries with him. But before he enters into the dark interior he must have some moments of rest, some breaths of fresh air. He gives the sign with the line and is brought up.

Again he goes below, and in his water-tight habit and shapeless helmet, awkward as one of the monsters of the deep, he presses himself through the narrow opening into the ship. He first proceeds to the fire-room. One, two, three bodies stand leaning against the sides; with glassy eyes they stare at the bold intruder, a gruesome company in this desolate place, yet the brave fellow knows no fear; he dares not know it, else he would not be capable of this earnest and terrible work. The nerves of the diver must be like steel, else he could endure only a short time the physical and mental strain of his calling.

But our diver seems above all not to know what nerves are; with unconcerned calm and placidity he seizes the nearest body, shoving it before him to reach the place of exit. A jerk on the line and he is pulled up, holding the body in his arms. Finally he emerges from the moist element with his quiet burden, greets with loud calls his comrades on board the rescue ship, and after a few seconds he is hoisted on board, together with the dead.

If we add to what has already been said that the monthly salary of this diver amounts to two or three hundred marks, it might perhaps appear to many to be too small, but in face of this it must be kept in mind that the salvage company are compelled to have in their employ constantly skilful divers, since their services may become necessary at any moment, and also that weeks and months pass in which they have nothing at all to do, so that they have an opportunity in the meantime to engage in other remunerative labor, under the restriction that they do not go out with the ships lying at the harbor into foreign seas. In addition to this, when the labor of the diver begins, a percentage is added to his salary, the amount of which, as well as that of the salvage money of the company, depends upon the value of the objects rescued and upon the difficulties which must be encountered in the labor. The value of that which has already been recovered from the watery deep by these companies since their organization foots up to the millions.

NEW ZEALAND AND ITS RESOURCES.

BY MARY H. KROUT.

NEW ZEALAND, in its topography, has been cleverly compared to a crumpled newspaper thrown down upon a table. It is a rugged and mountainous country, with imposing ranges along the west coast varied by volcanic peaks, many of them snow-covered and half the time concealed by clouds. It is without doubt the flower of the English colonies in Australasia. The climate is much more less rain and a lower mean temperature, while Stewart Island has been comparatively unexplored, little being known of either its flora or fauna.

Unlike Australia, which even in the most fertile districts is parched by droughts, sometimes of two years' duration, and which has few rivers or lofty mountains, New Zealand is extremely well-watered. There are abundant rains the year round,

HOCHSTETTER ICE FALL, TASMAN GLACIER.

healthful and invigorating than any of the possessions in the tropics; it produces all the cereals that grow in Canada, surpassing the Dominion in natural advantages for cattle and sheep-raising, because there is no severe weather, and flocks and herds can graze the year round. There are three islands, North, Middle, and Stewart Island, the first being sub-tropical, producing oranges and pineapples, the second having and both the North and Middle Islands are crossed and re-crossed by a network of pure streams, fed by never-failing springs and mountain snows.

While employment is rather difficult to secure and wages are low, living is extremely cheap. A comfortable cottage of five rooms may be rented in Auckland for five dollars per month; good beef and mutton may be bought for sixpence (twelve

ON THE AVON, CHRISTCHURCH.

cents) per pound; and delicious fish, the schnapper, are sold at a shilling a dozen, while fruits and vegetables are proportionally low.

New Zealand is a three weeks' voyage from San Francisco—an ideal journey for a good sailor. Leaving the Golden Gate upon one of the comfortable steamers of the Oceanic Line, crossing the bar outside and reaching the high seas—a lonely and comparatively untraversed waste of waters—the weather grows milder, the air softer, and sea and sky, day by day, more deeply blue. On the eighth morning the ship anchors in the land-locked harbor of Honolulu, where there is usually a stay of a day and night, which gives the tourist ample time to see the Hawaiian capital. The second week the steamer calls at Apia in Samoa, still more beautiful and richly tropical than the Hawaiian Islands. The third week land is again sighted—a naked, broken shore, forbidding and melancholy, its yellow, barren cliffs rising perpendicular from the sea. This is New Zealand. It is a portion of the great volcanic region stretching diagonally across the globe from our own Pacific coast, including Hawaii, Samoa, and adjacent groups. Except for a difference in the vegetation, the formation of the land is strikingly similar; there are the same jagged peaks and pinnacles, extinct craters, richly overgrown with grass or showing external marks of fierce volcanic action, pumice, sand, and lava, black and crumbling as the refuse of a blast furnace.

What is known as the Otaga district in the Middle Island strongly resembles England; around Christchurch, the capital, is the great Canterbury Plain, many miles in extent, a region of prolific wheat-fields, of fertile paddocks, bordered by green hedges and crossed by the slow-flowing but crystal clear Avon River. This comprises the richest farming land in the colony, and here are raised wheat, maize, oats, and potatoes, two crops of which are produced in the year. It furnishes a large portion of the food supply, not only for the colony itself, but for Australasia, Samoa, and Hawaii.

The cattle and sheep have been bred from the best English stock, the fleece of New Zealand sheep being of admirable quality and comprising all grades, from the coarser to that of silky fineness. I was told that, owing to the difference in climate and pasturage, the wool of American sheep undergoes a complete change a year after they are imported, and, in addition to this, owing to the extent of high and well-drained pasture-land, the flocks are free from many of the diseases with

LAKE TAUPO.

THE COUNCIL HOUSE, OHINEMUTU.

which American grazers must contend. The official government report for 1893, the year preceding my visit to the colony, stated that on an estate carrying 40,000 sheep the death-rate was but from four to six per cent. The product of wool and mutton for that year amounted to £5,668,624—over $28,000,000—and this, as the report explained, when the sheep-carrying capacity of the country had been but half tested. As might be expected in an English colony, the farmers took the greatest pride in their horses. Nowhere in all the country did I see a single starved or overworked animal, or one turned out to die after years of faithful service; they were exceptionally well-groomed and well-fed and where roads or streets were steep three were invariably harnessed abreast to tram-car, omnibus, or cart.

One of the most important industries, still in its infancy, is the export trade in frozen beef and mutton. What are called "freezing works" have been established in Auckland, Bluff, and elsewhere, and fish, beef, mutton, and lamb are frozen solid, sewed up in canvas, and transferred to the cold chambers of ships built for the trade, and thus conveyed to remote markets throughout Polynesia and Europe.

The manufacture of woolen goods has also been undertaken with much success, and fine blankets and rugs are made in Dunedin, and the latter, of a quality that in this country would cost twenty dollars each, may there be bought for nine dollars.

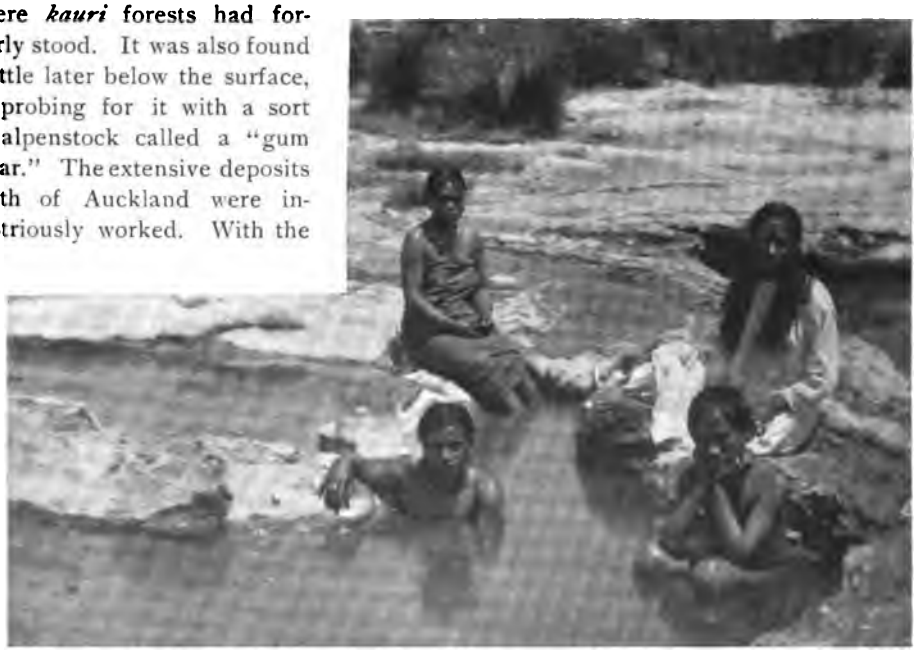
The mineral deposits are rich and varied, including gold, silver, platinum, tin, lead, and antimony. Coal mining is profitable, the bituminous coal found on the west coast being equal to any in the world, the output from mines which in 1893 were but half developed being over 600,000 tons. Many of the mining villages are a cheerful contrast to those of England and the United States; the houses, though small, are neat and clean, with flowers growing in window-boxes and in the front yard, and frequently with a grassy paddock in the rear for the cow. I saw none of the thriftlessness, the murkiness, and squalor which characterize the villages of our coal-mining regions.

It is not generally known that in constructing the great palaces for the World's Fair we drew upon New Zealand for one article with which it supplies the markets of the world; this is *kauri* gum, used in the manufacture of varnish, which is formed of the turpentine of *kauri* pine. It is yellow,

SIR ROBERT STOUT.
Ex-Premier of New Zealand.

translucent, resembling amber, and ornaments are made from it which are favorite souvenirs with tourists. It was first discovered in the bottom of swamps or cropping above the surface of the ground where *kauri* forests had formerly stood. It was also found a little later below the surface, by probing for it with a sort of alpenstock called a "gum spear." The extensive deposits north of Auckland were industriously worked. With the increased demand for the World's Fair, there was a rush for the gum-fields, and an energetic man was able to earn from fifteen to twenty dollars a week—which was considered excellent wages. But, as is usual, the stimulated demand was followed by over-production and consequent reaction, and in 1894 there was such distress among the gum-diggers that an appeal was made to the government for their relief.

The *kauri* is the monarch of the New Zealand forest, an indigenous pine, growing to enormous height, frequently eighty feet before it sends out a bough, while its average diameter is from eight to nine feet. It is said to be eight hundred years in reaching maturity. There is no underbrush in a *kauri* forest, the prince of trees permitting no rival within his domain. The *totara* is another species of pine, which, however, has none of the characteristics of the Coniferæ of other countries, either in habit or in appearance. The most singular of all is the *rata*, a peculiar tree, with somewhat the nature of a parasite. If it springs up near a *rimu* pine it winds about it like a huge vine, its tightening coils gradually crushing the



BATHERS IN LAKE TAUPO.

life out of the unfortunate pine. When it reaches the top it sends out branches, and stands, a hollow shell, its coils knit closely together by a dense network of fibers, which appear in the last stage of its growth. It has a like affinity for its own species, and a second *rata* springing up beside one of earlier growth will absorb and destroy it as it destroys the *rimu*. If, however, neither *rimu* nor *rata* is within reach, it grows up a respectable and well-behaved tree, attaining a height of from fifty to sixty feet, and is used for masts in ship-building.

The *totara*, which resists the destructive *toredo* worm, was used by the Maoris, the natives of the country, for the palisades with which they surrounded their *pahs* and in the manufacture of their wonderful, elaborately-carved war canoes. The upper branches of many of the taller trees are thickly covered with a great variety of orchids and air-plants, while the trunks are festooned with strange creepers, the most beautiful of which is commonly called the "Christmas vine." This almost covers the forests in certain sections and is a mass of blazing scarlet. The blossom, which is in its perfection in December, resembles the passion flower, with purplish petals around a disk of blood-red stamens. The acclimated trees, the plane and willow and orchard trees, obediently shed their leaves, conforming, however, to the altered seasons of the antipodes; the indigenous forests, which cover some ten million acres, remain perennially green. Under the trees, except in the *kauri* forests, as has been stated, there is a wild tangle of shrubs and ferns, many of the shrubs bearing a profusion of brilliant, orchid-like flowers. This undergrowth is almost as impervious as a stone wall, which the eye cannot pierce, and through which a man could not make his way save with his axe in his hand. The ferns are wonderfully beautiful; some are of great size, and there are spreading fern palms, walking ferns, and many other interesting and rare varieties. Here and there the starry crown of the cabbage palm stands out in vivid relief against the dark vegetation about it, and the hoary aloe springs up along the roadside to bloom once, then die. It is a singular characteristic of the New Zealand "bush" that it will not bear pruning. Any tampering with nature is resented; any letting of sunlight into its dim shades is fatal, and very few of the trees can be transplanted. Altogether the forests are strikingly somber; the foliage is so dark that at a distance it seems almost black; instead of the light, graceful leafage of the trees of our latitude, the gnarled, straggling boughs seem covered with thick, woolly moss, through which it would seem almost impossible for a bird to fly.

SUTHERLAND FALL, ONE OF THE HIGHEST WATERFALLS IN THE WORLD.

In the North Island there are stretches of barren plain, the soil composed largely

A GROUP OF NATIVE WOMEN IN THE KING COUNTRY.

of pumice, which crumbles into dust of powdery fineness. These plains are covered with the *manuka*, a low shrub, grayish green, resembling the juniper, and which in the Middle Island grows to considerable size and is used for fuel. Upon the plains —always at a safe distance—may frequently be seen droves of wild horses, that watch the traveler from afar, then toss their heads and gallop away. Like the Polynesian groups, there were very few animals in New Zealand at the time it was colonized by the English. The birds were chiefly the wingless species, the *weka* and *kiwi*—the monster *moas* having become extinct—with the beautiful *tui*, or "parson bird," so named from the two white feathers at the throat resembling clerical bands. The clear, pure notes of the bell-bird sounding from the thickets, miles from a human habitation, are like a fairy chime.

The *kea* is an interesting illustration of evolution. Living originally on grain and berries, it cultivated a taste for the kidney fat of sheep, which it learned to filch from carcasses hung by the butchers upon a frame called a "sheep gallows." From this it learned to locate the tempting morsel in the living sheep and attacked the animals in the field, tearing the flesh with its strong beak and claws, extracting the fat, and then leaving the suffering creature to die of its wounds. The degenerate *kea* finally became so destructive that the government was forced to offer a bounty for its scalp to save the flocks.

There were no fish in the streams, eels and small crayfish being the only living creatures in the fresh water, although the sea along the land teemed with many fine varieties. Among these was the strange frost fish, three or four feet in length, resembling an eel, except that it was silvery white. It was not caught either with nets or hooks, but came ashore on moonlight nights during the winter months and was found upon the beach by waiting fishermen. Many varieties of English song birds have been introduced and have multiplied marvelously, while the streams have been stocked with salmon with equal success. The introduction of the rabbit in a country where snakes and other natural enemies do not exist has been most disastrous, and much of the land has been ruined by their ravages, notwithstanding the strenuous efforts that have been made to exterminate them.

The two most interesting regions are the weird thermal region in the North Island and the fiords of the west coast, the grandeur of whose scenery is not surpassed upon the globe. The entire thermal region covers an area of over one thousand square miles, and its wonders are equaled only by those of the Yellowstone. The famous pink and white terraces lay in the heart of this region, and were buried under a shower of mud and lava in the eruption of Tarawera, June 10, 1886. The terraces were semi-circular, a series of steps over which flowed a shallow stream of water, from which silicates were deposited, coating the terraces with a crust white as marble or of a pale rose-color, the crystals glittering in the sunlight like jewels. It was supposed at first that the terraces had been blown up and destroyed by the steam generated beneath them by the volcanic fires, but it was discovered that they had been simply submerged, and that they are now slowly recovering their former beauty. The great thermal region abounds at close intervals with pools of boiling water or mud of varied color and consistency, both mud and water being strongly impregnated with salts, carbonates, and bi-carbonates of soda, while in others there is an excess of hydrochloric, sulphuric, and other mineral acids. The two most famous baths at Rotorua, all of which have active medicinal qualities, are the "Priest's Bath" and "Rachel's Bath." Both are intensely hot, blue as indigo, and the former, after repeated sounding, showing no bottom. Visitors at Rotorua are warned not to wander from the beaten paths, and so thin is the crust, with boiling streams lying so close beneath it and which may burst forth at any moment, digging is prohibited by law everywhere in this district. I saw one unfortunate who had broken through into water which, fortunately, was cold, but his trousers after his involuntary bath looked as if they had been dipped into kerosene. Besides the pools seething and bubbling on every hand and sending off clouds of sulphurous steam, there are many geysers, the greatest of which is Pohuto, which sends up a boiling column at regular intervals to a height of one hundred feet.

THE GREAT MGATIMANIOPOTO CHIEF "WAHANUI."

The scenery of the west coast in the Middle Island is as diversified as it is impressive. There are chains of ice-cold lakes, blue as sapphire, which lie among what are known as the "Southern Alps," overhung by peaks eternally snow-clad, of imposing grandeur. Mt. Cook, the loftiest, is 12,349 feet in height, while both Mt. Earnslaw and Mt. Aspiring have an altitude of over 9,000 feet. In this range are extensive glaciers, much surpassing those of the European Alps, while the entire west coast, wild and rugged, indented with sounds and fiords, is unsurpassed in its picturesqueness by that of Norway. Milford Sound is the most remarkable of the indentations; the entrance is but 130 feet in width, and the inlet itself, enclosed by lofty mountains, shows a bewildering variety of forests, glaciers, snowy

peaks, with myriad waterfalls, which rush down the declivity either in a sheer descent or in a series of foaming cataracts. The most famous is Sutherland Fall, which has a descent of 1,904 feet.

The Maoris, the New Zealand aborigines, are ranked by ethnologists as the first and most intelligent of the Polynesian races. They possessed great physical beauty, both men and women, and were a brave, war-like race, difficult to conquer, and had all the virtues of a primitive people uncontaminated by the evils of so-called civilization. They were skilled in many useful arts, wood-carving, the manufacture of cloth from the native flax, and their canoes were so well constructed that they made long voyages in them to the neighboring islands. They are gradually fading away before the steady advance of the Anglo-Saxon.

The cities of New Zealand, Auckland, Wellington, the capital, Christchurch, and Dunedin, are reproductions of the best English provincial towns, well paved, well lighted, well governed, and liberally supplied with libraries, schools, and universities. The latter are all coeducational. The single-tax experiment has not proved wholly successful, but the still more recent political departure, universal suffrage, has been a means of real reform, accomplishing even more than its advocates had hoped. It has forced the political parties to exercise care in the selection of candidates, and to consider brains and morals necessary qualifications in the candidate for whom the women electors vote. To show what per cent avail themselves of their political privileges it need only be stated that out of 109,461 women who were registered in 1894, 90,290 voted, and this in the face of inexperience and of long journeys which many were forced to take in order to reach the polling places.

R. J. Seddon, the present premier, was a miner, a man of a good deal of intelligence and force of character. The leader pre-eminent, however, is Sir Robert Stout, who has also held the office of premier. He is of Scotch extraction, cultivated and learned, a most interesting and delightful personality. He has been foremost in the advocacy of prohibition, the steadfast friend of equal suffrage, and a marked and stable influence in promoting the educational interests of the colony. He is a barrister by profession, at present a member of the colonial parliament, and will undoubtedly be chosen premier again upon Mr. Seddon's retirement from office.

MAORI TOMB AT TE KUITI, KING COUNTRY.

PRINCE BISMARCK.

BY FELIX L. OSWALD.

THE Nemesis of history has often strangely reversed the principle of the Jesuit moralists, who held that a worthy purpose will hallow the means of its attainment; and egotists, fanatics, and even criminals have been permitted to accomplish ends redeemed only by the choice of incidental methods. Armory mechanics, laboring in the service of despots, improved the primitive firearms of the Middle Ages into weapons which ultimately broke the power of feudalism. Henry VIII., the "British Bluebeard," stumbled upon the expedient of religious emancipation, and Otto von Bismarck, the champion of absolutism, became involved in enterprises that led to the foundation of the North German Empire.

The energy, the courage, and the talents of the "Brandenburg Richelieu" were acknowledged by his bitterest enemies, and his self-reliant arrogance was perhaps in a large measure a condition of his success. "We are told," says Count Cavour, "that luck aids the brave; but if it is true that the highest valor implies the heroism of self-denial, the proverb needs revision. Fortune favors mainly the self-asserting brave—the bully." In aggressive pluck and public opinion defying dogmatism, the patriarch of Friedrichsruh had no match for the last two thousand years, and since the days of Felix Sulla no champion of unpopular principles was ever thus favored by a combination of exceptional, and almost incalculable, circumstances.

From the standpoint of an East Prussian Junker there was perhaps nothing specially objectionable in the social and political tenets of the man who defeated the Liberal Reform movement of '48; but it is no exaggeration to say that with nine tenths of his countrymen Bismarck was, up to the eve of the Sadowa campaign, more unpopular than Castlereagh ever was in Great Britain.

Previous to the memorable revolt of the German Democrats, the eldest son of the proprietor of Schönhausen was known chiefly as a "Renommist," *i. e.*, a braggard and provoker of duels, of which he is said to have fought more than twenty (twenty-seven, according to one of his biographers), and patron of symposiums, though his worship of beer seems to have been somewhat exaggerated. He had married in 1846, and ceased to carouse; but two years later was elected member of the Prussian Landtag, and during the winter of '48 began to attract attention by his reckless attacks on every reform delegate.

The *Rothen*, the "Reds," or red-hot Liberals, by no means monopolized the honor of his diatribes. He denounced radicals and compromise reformers with impartial fury, and did not disguise his championship of absolutism and unconditional submission to the decrees of secular and spiritual autocrats. Constitutional guarantees he disregarded as the French heretic baiters disregarded the Edict of Nantes. Russia, if not the Byzantine Empire, seemed to be his ideal of a well-ordered state.

The model citizen of Junker Bismarck's Utopia was merely a punctual payer of tithes and taxes. If he could have had his way every dissenter from the program of his feudal propaganda would have been impeached for high treason.

The mere appearance of the "Mirabeau of Absolutism" was often a signal for a storm of cat-calls. Some of his own relatives advised him to moderate the vindictiveness of his remarks. The king protected him but did not underrate the odium of his polemics, as attested by the curious fact that the government censors were instructed to prohibit the publication, *without comment*, of some of his rabid speeches. Their *verbatim* report in a popular newspaper would

probably have provoked riots; but enough was published to make the man from Schönhausen the most unpopular citizen of the Prussian monarchy.

The students of several German universities vented their indignation in *pereats*, the Berlin Liberals in satirical pamphlets. The *Kladderadatsch* and other opposition papers had to be confiscated again and again. Caricatures of the objectionable Junker blossomed out on thousands of advertisement walls; and the loudest acclaims ever heard in an exhibition building were probably the cheers evoked by the conceit of a wag who had rented a stall in a Hamburg bench show. A few minutes after the opening of the exposition the gate receipts were stimulated by an uproar of laughter in the main hall and a clapping of hands that never ended till a squad of policemen forced in their way to investigate. Hilarity so obstreperous and protracted, they felt sure, could not have a legal cause, and their misgivings were confirmed when in a corner of the front hall they found the ugliest cur ever seen outside of the Constantinople harbor slums, a pot-bellied, snappish, bandy-legged monster, with a bull-dog head and a conspicuous placard of entry notes: "Name: Bismarck; character: *Schweinhund* (say, hang-dog); value (*werth*, *i. e.*, worth): a rope."

Bismarck was repeatedly hooted on the public streets of Berlin; and that the same man, without any change of principles, should have become, and for thirty years remained, the most popular individual of his native land, is certainly as striking a commentary on the caprices of public opinion as the *post-mortem* apotheosis of any martyr of prejudice.

The tide of his fortune turned with the battle of Sadowa; but if he really plunged his country into a maelstrom of war in order to divert attention from domestic squabbles, it is at least certain that he had not foreseen the portentous results of his foreign policy. His international transactions of 1866 began by robbing Denmark in the interest of the Duke of Augustenburg and then robbing the Duke of Augustenburg in the interest of Prussia, but the evidence of his own diplomatic correspondence proves that he had not anticipated the magnitude of the storm he was conjuring up against the House of Hohenzollern. That Austria would protest, he could hardly doubt, but hoped that her active interference would be prevented, or at least postponed, by the exigencies of the Italian campaign. He felt sure that the smaller German states could be bullied into connivance.

Hanover and Hesse were really more than half inclined to stand neutral, but the outrage of Bismarck's high-handed proceedings turned the scales, and Prussia was confronted by an alliance of Austria, Saxony, Bavaria, Nassau, Hesse-Cassel, and Hanover, backed by the sympathy of all Northern Europe and the sympathy and probable assistance of France.

The genius of the strategist Moltke averted impending ruin so triumphantly that Prussia could celebrate her peace jubilee by skinning and eating three of her late adversaries; but Count Bismarck contrived to pocket the credit of the net result, just as in 1871 he feathered his cap with the foundership of the North German Empire that owed its origin to an impulse of the emotional young king of Bavaria.

Like the first Napoleon, he "silenced the clamors for liberty with a surfeit of military triumphs"; but while the Corsican Cæsar had reorganized his army from the outfit of a baggage train assistant to the functions of the adjutant-general, Count Bismarck never interfered in military concerns except by discouraging the plan to abolish the absurd prerogatives of the hereditary nobility. Still, his fellow citizens felt that the restoration of the German union was directly or indirectly the outcome of his political operations; and the more clear-seeing patriots of the reconstructed nation were inclined to pardon the original purpose of an enterprise that had been rewarded by such wayside treasure-troves.

The North German Empire became an established fact, and Prince Bismarck reveled in more than the prestige of a King-

maker Warwick, though the first effect of the enlarged frontiers was the restriction of national liberties.

The anti-progressive Landstag delegate had become a chancellor of the empire, and continued his suppression of Liberal reforms with largely increased facilities of persecution and revenge. After Sedan, as before Sadowa, he exerted his utmost influence to check the activity of reformers of all classes. Political and religious liberty were reduced to the lowest measure attainable in the birthland of the printing press.

The famous May Laws had nothing to do with the desire of religious progress but were dictated by the plan to make the German Catholics more completely dependent upon the decrees of the Prussian cultus minister, or, as a Polish prelate expressed it, "to transfer the prerogatives of the pontificate from Rome to Berlin."

The liberty of the press was circumscribed with a rigor rarely attempted under the reign of the Brandenburg electors and unheard of in the days of Frederick the Great. A charge of "high treason" hung like a Damocles sword over the head of every Prussian editor. Free-thought lecturers might as well have tried to harangue a squad of Russian *tschinovriks*. "I am going to Turkey, to breathe the air of Unitarian freedom for a while," said a would-be reformer of that class, after his experiences in Berlin and Breslau.

Whispers of dissent from the dicta of the infallible chancellor were punished as a sort of blasphemy. Poor old Professor Geffken was hunted down and jailed like a highway robber for having ventured to publish extracts from the diary of Crown Prince Frederick, with certain anecdotes illustrating the despotic conduct of his father's grand vizier. Foreign newspapers that failed to *kotow* to the power behind the throne were promptly prohibited, and their secret venders might be glad to get off with a sentence for violation of the custom-house laws, and in several cases were ruined by excessive fines or indicted for "conspiracy," as if they had been caught peddling dynamite bombs.

Strictly non-political reformers did not fare much better. The eyesore of every independent German thinker and writer, the extravagantly absurd German alphabet, could probably have been abolished fifteen years ago but for Bismarck's opposition. It practically excludes Germany from the literary republic of the Caucasian nations and degrades the Fatherland of philosophers below the progressive rank of semi-barbarous Muscovy—Russian letters, in their amended modern form, being less intricate and out and out more legible than the crazy Gothic monastic *Schrift* that still sticks to German hornbooks as the worst legacy of the Middle Ages. In a public debate on the comparative merits of *Schrift* hieroglyphics and the letters of the Latin alphabet an advocate of reform challenged his opponents to dispute the logic of a simple, practical experiment. "Select by lot any line from a German newspaper," he said, "and write it on this blackboard with Latin capitals, and I will read it as easily as lower-case print. Then let an impartial penman do the same with *Schrift* capitals, and I defy you to decipher it without long and laborious scrutiny. At first glance a foreigner would be tempted to pronounce it a Chaldaic prescription for epileptic fits."

To aggravate the case, it has been proved that "German" *Schrift*, so-called, is not German at all, and that several hundred years ago Fatherland scholars used the cosmopolitan alphabet like other rational bipeds, till under the auspices of the University of Prague a clique of convent copyists contrived to introduce the corkscrew and polly-wog innovation. "The way to resume specie payment is to resume," said Horace Greeley, and a considerable number of German writers have initiated the abolishment of the national nuisance by quietly recommencing the use of Latin letters. But an attempt to popularize the proposed reform was nipped in the half-blossom by the veto of the conservative chancellor, who refused to accept, or even to read, some presentation copies of German books because they were not printed in the "national" alphabet

He lost no opportunity to snub and thwart the progressive nations of the world, America, England, Switzerland, and France, and initiated the *Wett-Kriechen*, the "crawling match," before the throne of the St. Petersburg knout bully. He snubbed and antagonized the modern Titus, the whole-souled, chivalrous, and liberal Emperor Frederick, and probably shortened his brief reign by badgering him into the outrageous treatment of the gallant ex-prince of Bulgaria, and forcing him to break the heart of his pet sister—all to avert a grunt of the bullheaded Muscovite Jew-baiter.

Between a Liberal emperor and a *junta* of Liberal deputies the champion of feudalism would have been crushed as between an upper and nether millstone if the opposition parties of the German Reichstag had not come to be split up into a bewildering number of factions that can rarely be made to pull in one team. The imperialists, on the other hand, could always be persuaded to rally around their champion. His all-comprehensive hatred of progress was a bond of union that made all Conservatives kin.

Nor would it be fair to deny that the Brandenburg Boyar had the virtues of his faults. His opponents poked merciless fun at the remark of a loyalist who adored the Friedrichsruh oracle as the "incarnate conscience of the German nation," and the procurator of absolutism himself never pretended to be handicapped with conscientious scruples; a correspondent of the Paris *Temps*, indeed, goes so far as to denounce him as "the most unscrupulous politician who ever bullied his way to power since the time of Cardinal Dubois"; but the arrogant Junker had plenty of class pride and class honor, as well as of class prejudice. For nearly twenty years he used his influence as a corporation counsel of the Prussian nobility. They invoked his decisions to avoid the scandal of litigation, and more than once to compromise the scrapes of titled prodigals. On such occasions he did not hesitate to indorse the riot act with severe private reprimands, and in extreme cases sometimes advised parents or guardians to leave the offenders to their fate, or let them consent to the alternative of renouncing their rank, though he was apt to be better than his word, as when he induced the grandfather of the present emperor to intercede in behalf of a young forger whose widowed mother threw herself at the chancellor's feet and pledged her word to bundle off her scapegrace to the antipodes.

His selfishness, too, has been exaggerated. He was an "egotist by proxy," trampling alike on private rights and public sentiments, to serve the interests of his emperor, but to his neighbors and associates he was a friend in need and shielded more than one talebearer who had abused his confidence.

Still, the citizens of the new empire began to weigh the loss of liberty against the advantage of territorial acquisitions, and the influence of the pig-iron chancellor was fast waning when Emperor Frederick died, and the pranks of his half-crazy successor gave the old campaigner a perhaps long-desired opportunity to retreat with the honors of war, and save himself and his prestige in the ranks of the opposition.

As a mutineer against the caprices of such an emperor the political exile was sure to become a public pet, and when it was understood that the modern Caligula both hated and feared the founder of his empire, malcontents of all classes combined to enter a protest by a pilgrimage to Friedrichsruh. Thus fortune had once more saved her favorite, and for the last seven years of his prosperous life the popularity of the ex-vizier steadily increased with the unpopularity of his sultan.

THE PSYCHOLOGY OF WAR.

BY C. FABRIS.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE ITALIAN "NUOVA ANTOLOGIA."

A SERIES of ten lectures on war which were delivered before the Peace Society at Milan by Guglielmo Ferrero has been recently published in book form and is now open to a wider public. The starting-point of the discussion is that war is the daughter of the worst vices of the human race and not the mother of the finest virtues; that it has nothing more to do with the civilized peoples of Europe; that it is disappearing, and that it is dead and lives only in the imaginations of men. The author therefore calls upon us to stop the ambitions which spring from war, to extinguish the light by which military exploits are embellished, and, turning especially to Italy, he enjoins us Italians to cease our endeavors to make the perilous plant of military glory take root among us.

This is the principal, the fundamental idea of this book. But we also find in it the more vast and greater thought that the present generation stands at the threshold of two worlds, of two different civilizations. An old and rough form of evil, represented by war, prevails in the one, the thirty centuries of history that are behind us, while labor and the manifestations of economic activity will fill up the civilization that is now appearing. Inspired by the grandeur of his thought the writer does not content himself with ideas about the military spirit and war, but goes on to discuss the attitudes of the various nations toward the opinions he upholds. He meditates on the influence of the environment in which we live, and proposes with great courage some of the most difficult problems that concern us. Let us look at a few of his rules and examples.

Can war, as Ferrero affirms, be the product of the caprice or evil qualities of one man only, however active and energetic his will may be? If this were true then the Napoleonic wars would have no other motive, as he says, than "to destroy certain antiquated institutions and give thrones to Napoleon's relatives and generals." This, however, furnishes no historical explanation for those wars. They were in fact but an episode in the great and persistent struggle between England and the continental powers for the mastery of the seas, which had been going on since the seventeenth century. It is true that great historical events are like the façades of monumental churches, which can be understood in their entirety only when viewed from a distance. Events as important as those which occur during a long war cannot be measured by the narrowness of the will of one man. Napoleon received Belgium and Holland from the Directory—countries which had been the object of the thoughts and efforts of Louis XIV. With these countries was also transmitted to him the germ of the war necessary to keep them, in the face of the interest which England showed in having them independent of France. It was not a mere matter of chance that Napoleon began his career as a commanding officer by finding himself opposed to English soldiers at Toulon and closed it in front of the English soldiers at Waterloo, any more than it was accidental that the culminating point of his political career was countersigned by the hour when he undertook the Continental Blockade against England. Perhaps the whole life of Napoleon, so far as it concerns history, is only an episode in a great era which is still unfolding and which is closely connected with the greatness and political existence of the English nation.

War cannot be the consequence of the character of one man who is singularly destined to relieve his evil impulses by leading his fellow men into mutual massacres. It cannot be represented by one

man, even were he Napoleon, and history if thoroughly studied does not support such an assertion. The historians of the classical school used, indeed, to justify and explain every event by referring it to the ambition of some all-powerful mind, but theories like these are no longer accepted. War is born of an accumulation of circumstances from whose influence men try in vain to escape. And for this reason it is useless to counsel a people to retreat at certain moments before the necessities of its existence. It is useless to induce that people to demand to be let alone, like a tired wrestler lacking confidence, who does not feel the need of descending into an arena where he is called upon to give proof of himself. Whether it wishes or not, the circumstances, the life itself, of one people are joined like the cogs of wheels to the circumstances and the life of all the other peoples in whose civilization it shares. If its situation in regard to the current of history calls it to war, it will be dragged into it. Unwilling or unprepared, it will not be able to escape from the scourge. This is not a profession of blind fatalism on my part, but it is a necessary result of the bonds which bind nations together that belong to the same general society and which form a well-connected system. No one nation can withdraw from it, no one can stop itself or tear itself away from the movement which draws all along, and which is the resultant of the accumulation of interests and aspirations, concord and discord, that excite each one of these.

Ferrero says that "war is the first erroneous solution given by the majority of peoples to the problem of happiness." And on this account he believes that war is the product of the will of one man, who is called Napoleon, Septimius Severus, or Attila, or else of a group of men, like those who surround the Mahdi. Only the wicked passions of that man or those men can lead to so much evil, and only their blinded reason can make them believe that war can be an instrument to arrive at happiness. Thus in the bosom of an ingenious and tranquil people a Gasparone or other suddenly arises, draws it into the orbit of his own self-interested illusions, and links to this a chain of woes which last until Gasparone is somehow suppressed. But why not call this war, whose existence embarrasses the moralist and the sociologist, the last and not the first means to which dissident peoples recur in order to settle their differences? Why incriminate our ancestors for having left us the heritage of an error in the examples of that violence without which they believed they could not remove the obstacles that were in the way of their happiness? Our elders in fact defined war as the *ultima ratio* and conceived it as such. Let us return, then, to their definition. The sociologist accepts historic proofs and these proofs correspond to a lasting conception which people have formed in order to explain the fact of war to themselves and to have recourse to its bloody answer. When persuasion has not sufficed to remove the obstacles that one social group sees another raising to the detriment of what it calls happiness, and when it no longer finds any tribunals to which it may profitably recur, above all, when human passions mix in the matter, then there is nothing left but force. It is in this light that socially organized peoples have ever regarded war, and they have guided themselves by this conception whenever they have taken up arms. The sword remained in its sheath until every other argument was exhausted.

War is not a sudden outburst of savage passions. It is a thought-out effort to reach a goal which could not be attained by any other possible means. One fine day the capital of France reechoes to enthusiastic shouts which call the citizens to arms, point out the enemy, and show his vital parts so as to incite all to a fanatical crusade against him. The cry "On to Berlin! On to Berlin!" spreads abroad throughout all France and a terrible war unexpectedly breaks out, as if through the medium of one of those suggestions that often overcome a crowd so mysteriously.

Is this war the result of the real desire of that excited crowd? It would appear so. After the war was over we found out by a volun-

tary indiscretion that the omnipotent minister of the king of Prussia had made up a telegram and disseminated it among the European press, of such a nature as to profoundly shock the self-love of the French and throw them headlong into war. This war, then, was the result of the will of Bismarck, who was aware through the information furnished him by General von Moltke that the probabilities of victory were rather on his side than on the side of the enemy? If Bismarck did not really believe this statement himself, many believed it, especially when they learned of the anecdote later on. And yet such a belief is but very superficial. That sudden war which began in July, 1870, had been preparing with unerring fatality during the decade which preceded it. The glorious period of hegemony which France gained in Europe through the Second Empire had only retarded the times of a slow political decline. Indications of it began to appear in the disputes regarding the events in Italy after the war of 1859; they became more evident in the abandonment of the Polish revolution, in the uncertainties regarding the Danish War, in the fiasco of Mexico, and finally in the unexpected victories of Prussia over Austria, and the unsuccessful attempt on Luxembourg. It seemed as though the German national movement concurred directly with the lowering of the power of France. This movement certainly disturbed the base on which the pretensions of France had rested up to that time, and in 1870 the French nation disregarded the restraints of previous years and plunged into a war in order to win back its departing influence.

Even the wars of Louis XIV., the king who confused himself with France in all his aspirations and interests, are of a less dynastic character than historical manuals judge them to be. It was the old quarrel of the Rhine which was at the bottom of them, a quarrel that goes back in history so far as Charlemagne and had drenched the seat of the Frankish kings with blood. So that we must seek further than the unrestrained ambition of one man for the causes in the complicated currents of history that led Louis XIV. to take up arms three times over the Rhenish territories. Whether it is an army placed in the hand of one man or a nation that springs to arms, the effort in either case cannot be the result of the one individual will, however energetic that will may be. Charles XII., beaten at Poltava, after Sweden had given up the dream of checking the power of Russia, as it had already withdrawn from playing a preponderating part in Germany, could only fill Europe with the fame of his daring adventures. And it was an obscure musket-shot treacherously fired at him under the walls of Friedrichshall that removed his will from the scene of action.

War is the collective act of an entire people much more frequently than it is believed to be. It could not seem possible that with the present tendencies of science to explain human events as the product of a collective will, which in turn is developed by fatal laws existing in the world, the sociologist should believe that war alone is an exclusively individual phenomenon. A series of formalities has always preceded and accompanied the shock of war. These formalities are not accidental, they are inherent in the very phenomenon of war. To have believed them mere conventionalities was as detrimental to the just conception of the essence of war as the limiting of the cause of war to the single act by which it is decided. The difference between any two peoples always starts from a well-defined statement. Ways of persuasion to settle the difficulty are always tried, but at times there is no other possible solution than the sword.

Perhaps this way of considering the phenomenon of war takes away an illusion dear to those who hope that the great law of history consists in the progressive passage from the state of war to the state of perpetual peace. This first solution which is hurriedly given to war, with the haste of one who cannot procure for himself a better solution for it, leaves an opening to the hope that sooner or later new solutions, more agreeable and more conciliating, may be substituted for those hitherto

inspired in men by violence. How war, which is a mysterious law of cosmic life, is to cease in human history, is truly not understood. Yet the conception of war as an extreme and inevitable remedy, when every other remedy has proved useless to procure for men what they think is their happiness, this conception is a profound homage rendered to human reason and therefore to the civilization of nations. And if this complex thing which we call civilization is going on constantly improving, and is to increase genuine knowledge of what surrounds us, and with this increase develop our reasonableness in wishing, desiring, and demanding, it will diminish the need of recurring to violence, and war will become more and more infrequent. But only more infrequent; it will not disappear.

Thus we shall find an explanation for the two fine historic figures of Garibaldi and Julius Cæsar, which seem to perplex Ferrero to such a degree that he creates for them a new classification of war into sad and gay, so as to conclude that these two great warriors found war cheerful. No. In their steps blood ran too, and, to speak the truth, too much blood marked the footprints of Cæsar in quelling the revolts of the Gallic tribes. But the lofty thought which sustained Garibaldi, the champion of oppressed peoples, and the broad conception that guided Cæsar, the founder of that political equilibrium which received the name of the Roman Empire, explain in our eyes the violent actions to which both were forced to recur in order to accelerate the fulfilment of a task which could not have been wrought by the means of persuasion alone.

Whatever may be the reason for it, the use of war as a means of settling their difficulties seems to have been discouraged lately by the governments of Europe. Their armies that could be organized in view of a campaign have increased, the means of which they dispose in waging war have been made more deadly, and yet Mars seems to have departed to other regions than Europe. With the exception of the short and lifeless Greco-Turkish War, a war which was an evident manifestation of repugnance to war, peace has prevailed in Europe for a considerable time. So that, now that Napoleonism has so tragically disappeared and Austrian diplomacy has changed its direction, peace seems assured, and a new period of humanity is opening. At least this is the view Ferrero takes, and it may be so. Yet suppose a man of evil should arise again, and suppose the policy of Austria, buffeted as it always is by the aspirations of the Slavs, Hungarians, and Germans, should change once more its course. This certainly is too narrow a view of the subject. It excludes the influence of Russia, and that is excluding the struggles engaged in by all Europe to close to her the gates of the Bosphorus. Really the Balkan Peninsula to-day has less interest for us than it had twenty years ago on account of Russia, and that empire, which for a century and a half at least aspired to an active part in European affairs, had blotted out Poland in doing so and tried to seize the banks of the Danube, is to-day making greater account of her Asiatic interests and seems indeed to be moving toward the East. Still Russia does not lose the position of a European power and has no reason for wishing to lose it. She rather stands as an intermediary between European and Asiatic civilizations.

But with all this we do not wish to deny that a great change has taken place in the last quarter of a century in the direction of the currents affecting European history. Other interests are now substituted in the place of those which were connected with political and territorial systematizing of states, and among these new interests the economic predominate, or seem to predominate. It is also a fact that the very events of political history appear under a new aspect. We are no longer considering the relative proportions of the extension and power of states in order to establish an equilibrium which may consolidate peace among them, or reestablish it almost automatically whenever it is disturbed. The diplomats of the eighteenth century and of a certain portion of the nineteenth wore

themselves out over this problem, with very mediocre results. Nor are we any longer fixing our attention on rounding out the confines of European countries on the basis of ethnological researches. Peoples of the same race are now approximately grouped under the same governments. The discrepancies that still exist would not justify a war undertaken to obliterate them.

On the other hand, new and rather ill-defined reasons for rivalry are coming up in regard to matters beyond the sea. These reasons are still surrounded by the fantastic atmosphere of the partly known. They cover a vast zone, which, extending from the tropical regions of Africa, comprises the two great basins of the Red Sea and the Euphrates, or the passages between the Mediterranean and the seas of the East, and reaches up through the peninsulas of Asia to the coasts of China and Japan. A misty sentiment of necessity urges on the peoples of Europe to seek in this wide territory new commercial elements, new springs of riches. Our attention to-day is attracted by a dispute in regard to the limits of lands on the Niger, to-morrow by a caravan of European explorers or diplomats massacred in the regions of the Congo, then by a long, obscure struggle in Tong King, by a rebellion of tribes on the outskirts of India, by the confused reports of intricate negotiations between the court of Pekin and European powers, or by the terrible cry of a severe war fought by Europeans and Africans on the borders of Ethiopia.

These scattering events all combine to reveal the beginning of a new phase in history, the drawing together of two extreme civilizations, that of Europe with that of Farther Asia, and the contact of European and African peoples. Before this new order of things the importance of those questions which have hitherto been at the bottom of European politics undoubtedly dwindles. And in the meantime, as a sign of the new era, a tendency is manifested of turning toward the development of navies a great part of the interest which has hitherto concerned itself with the evolution of land forces. We get a glimpse of the idea that the theaters where future European dissensions will be decided lie beyond the sea.

By a circumstance which can be easily explained these changes are already showing themselves under the form of a series of collisions, of which England is the center. Mistress of the sea down to 1870, or somewhat later, she had planted her standard on all the shores of the world that seemed commercially promising. It was natural, when the other European nations, under the impulse of new needs, also wished to seek for means of satisfying these needs outside of Europe, that they should run up against English interests. The former seeking to expand little by little and the latter trying to establish themselves as firmly as possible in order to meet the terrible struggle that is imminent, have gradually developed in the last score of years an opposition of nations from which no country of the Old World can henceforth hope to escape, and of which the consequences are becoming more serious every day. And if the present conflict over Cuba is topographically outside the zone circumscribed above, we may safely say that it belongs to the same historical cycle which, beginning with the separation of the American colonies from the mother country, is now going on, completing its regular evolution. This does not look like the dawning of an era of peace. It is rather the removal of war to more distant and vaster theaters.

THE SOCIAL PASSION IN MODERN ENGLISH NOVELISTS.

BY VIDA DUTTON SCUDDER, M. A.

ASSOCIATE PROFESSOR OF ENGLISH LITERATURE IN WELLESLEY COLLEGE.

PEOPLE who read novels for the love-stories they tell rarely appreciate their value as social documents. Yet social documents of the highest importance they really are. The rise of the novel as an art-form in the eighteenth century is coincident with the awakening of social criticism and of interest in society as a whole. In the hands of Richardson and Fielding fiction was a brilliant instrument for preserving the manners and morals, the ideals and conditions, of the day. Later on it turned romantic, deliberately faced the past, and dealt with castles and tilts and knightly adventures, instead of with the life of its own day. But at the beginning of the Victorian age it became realist again; and with one or two lapses into romanticism, it has remained so till now. It has pictured what the essayists discuss. If we would know modern England it is to modern stories we must turn. From "Oliver Twist" to "Marcella" and "Sir George Tressady," social pictures, social problems, fill the stage.

Dickens and Thackeray were the representative novelists of the first of the period. They began to write between 1830 and 1840, and they showed us the society of their own day. They do not individualize much. Men appear to them in social groups. Turn over their pages rapidly; you have walked through streets, you have frequented inns and clubs and evening parties, you have glanced at home-interiors, but into the soul of the individual man you have never looked. You have passed modern society in review. Taken as a whole, these two authors give us a bird's-eye view of society from top to bottom, and their flights rarely intersect.

Dickens starts in the depths. The "submerged tenth," the criminal class, and those victims of society who in their turn prey upon society gain new vividness in his pages. Through "Oliver Twist" the English public learned for the first time to recognize the touch of common humanity in murderer and prostitute. Starting with these lowest social types, the genius of Dickens moves with ardor and ease and affection among the wide ranks of the common people. It is the great world of trade that he shows us, especially of retail trade. His environment matches his people; it is the great London of the lower middle class. A gentleman, a lady, he cannot draw, and he rarely attempts it.

Where he leaves off Thackeray begins. The great world of society is his province, where trade, if practiced, is never mentioned. The charming behavior of his people goes far to make us forget their morals. He describes for us the upper classes of England, Arnold's "Barbarians," as seen with kindly, if satirical eyes.

The world of Dickens exists that the world of Thackeray may live. Trade and society ignore each other in these books; but they are tied together by innumerable finest threads, so that however they may face in opposite directions, they can never move apart.

What impression does this society make on us? First, it is commercial. Dickens' world is absorbed in making, Thackeray's in spending, money. Money is the passport of fashion, and is rapidly becoming the measure of station. Read the eighteenth century novel to see how new this is. The society there described has plenty of immoralities; but mercenary it is not.

Then the Victorian society—in fiction—is materialized; the world of Thackeray materialized by luxury; the world of Dickens by want. Sweet women and brave men are to be found here, and the prattle of little children; but where are large

ideals or noble lives? Every age is most profoundly known by its heroisms; what types of heroism do the modern books of Dickens or Thackeray afford?

The modern world, to the eyes of these novelists, affords no causes to live and die for. Their novels hold no trace of social discontent; they breathe no wide social hopes. Not one person in them rises to challenge the existing order or to dream of large social service, so familiar a motive in life and art to-day. The individualistic period of democracy, the early phases of a mercantile civilization, the new plutocracy, are mirrored in their pages.

Their books show the social surface alone; below the surface, deeper forces were working. The awakening of these forces, the quickening of social passion and social conscience, were quickly caught, ardently expressed, by the later Victorian novel.

There were grave omissions in the social studies of Dickens and Thackeray. They did not know the agricultural poor; they were novelists of the city. And even Dickens was not fully aware of that silent throng on whom rested the whole social fabric—the productive class. His people, workers though they be, live by selling, not by making. The time of the proletariat, in art, had not come; and only slowly even now is fiction coming to appreciate the intense dramatic values of the life of the laborer.

About 1850 the simple social pictures of Thackeray and Dickens gave place to a novel of impassioned protest. Dickens himself, in "Hard Times," produced a book of this class. Kingsley's "Alton Locke" and "Yeast" are strong examples of the type. Artistic freedom, in these books, is hampered by overwrought feeling, and they were soon succeeded by a larger, calmer kind of novel, which reflected the deep social unrest and uneasy impulses of the central Victorian period, and sought also to give constructive suggestions of ways in which social salvation might be found.

George Eliot is surely the novelist of greatest genius England has known, and she represents this period. The social interest of her books is profound. They are novels of a social transition. The earlier—"Adam Bede," "The Mill on the Floss," "Silas Marner"—show in calm beauty the wholesome lives of those rural folk whom the novelists of the fevered city ignore. The later books all give us the image of a society, sleeping yet, but dreaming in its sleep, and ready to wake. The restlessness of noble spirits in a social environment too narrow, their ardent if undisciplined impulse toward service, their craving for ideals, heroisms, martyrdoms, their relation to the large currents of human passion and duty, all these things she reveals to us till our hearts beat in unison with those of a Dorothea, a Romola, a Deronda.

"Middlemarch," the first great social book, is a study in failure. It shows us how the impulse toward social service must struggle helpless when new-born in a materialistic and convention-ridden society; yet, though sad, the book thrills with hope; for we feel that this impulse once quickened can never die, and that though Dorothea sink back baffled, new heroines, new heroes, wiser and stronger, will appear, and introduce into society redemptive force. Such a hero George Eliot drew for us in Daniel Deronda—the young Jew, brought up by an English gentleman, who abandons the British aristocracy, brilliant marriage, fine career, to throw in his lot with a race outcast and despised, and, in sacrifice of all the world holds dear, find the larger cause he longed for.

Deronda was first of many heroes, in fiction and fact, to find the larger life which our earlier novels never dreamed of, in service of the democracy. The English realistic novel of the last twenty years lays increasing stress on social problems and possibilities. It has woven literary Utopias, like Morris' "News from Nowhere"; it has propounded schemes for social salvation, like Besant's "Children of Gibeon"; it has noted social conditions and theories in the New World, where all these things

are still in flux, as shown by the work of Howells and Warner. To note the advance in social ideals through the century, we need only compare three heroines, Thackeray's Ethel Newcome, George Eliot's Dorothea, Mrs. Humphry Ward's Marcella. Noble creatures all of them, and not unlike in type, Marcella achieved what Dorothea longed for and Ethel never dreamed of; and the difference is full of significance for the social student.

Every year the trend toward social interests becomes more marked in fiction. But our limits do not allow us to enter the contemporary period. In the work of Dickens, Thackeray, and George Eliot alone, we see that society during the first fifty years of the Victorian period had passed from sleep to waking, from placid self-satisfaction and low social ideals to a restless search for social salvation and an impassioned desire for social service.

"UNCLASSED" WOMEN IN FRANCE AND THE COLONIES.

BY COUNT D'HAUSSONVILLE.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE FRENCH "REVUE DES DEUX MONDES."

BY "unclassed" I mean the women or rather the young girls who, born among the common people, have made an effort to raise themselves above their surroundings without having succeeded, and who oscillate, uncertain of their future, between the condition they have left and the one they have not yet been able to attain.

The number of the unclassed in our modern society is large. It increases each year and this increase provokes among moralists sorrowful reflections, in which I cannot participate unreservedly. The girls who attempt this effort are generally of refined natures, whose delicate feelings are bruised by the rudeness and often the coarseness of the environment in which they would naturally be called to live. The best and most refined, when they have received a Christian education, often feel awakening in them the call of the religious vocation. Others who have some ambition and some instruction are drawn toward public functions, if one can so call the modest situations of parish teachers, postal clerks, telegraph and telephone operators. Many others aspire to employment in the great financial and industrial societies which admit women to their offices. Let them succeed and their future is assured; but let them fail and they find themselves struggling with a misery even worse than they would have known if they had not aspired to set out from their humble environment.

Let us see now what chance they have of succeeding. It goes without saying that it is impossible to give, even approximately, the number of the unclassed. Statistics may give indications more or less precise of the distribution of women among the different professions to which they most generally turn, dressmakers, linen-drapers, milliners, etc. It cannot do the same for the employments they seek. An idea cannot be formed, even approximately, of the number of these applicants except by gathering from right and left information which has at least the merit of exactitude. It is that which I am going to attempt to do.

The principal factory of the unclassed is the ministry of public instruction. Since the new school legislation has rendered obligatory the creation of a great number of new girls' schools, at the same time proscribing, for the future, lay teachers for the parish schools, it has opened before the ambition of the young girls brought up in our primary schools a career that at first they thought unlimited.

I have not the figures for the number of teachers with certificates awaiting employment in all France, but I have been able to procure them for the department of the Seine.

From January 1 to December 31 last, there had been addressed to the prefect of the Seine 897 applications for employment as assistant teachers in the schools of the department. During the same lapse of time 394 applicants had been provided with employment as assistant or auxiliary teachers. This relatively high number is altogether exceptional and special to the year 1897. It includes 288 provisional appointments and only 106 nominations for positions normally vacant. The latter figure is the yearly average.

The applications received during the year and not granted take rank after those of the preceding year, and so on. Thus the list increases indefinitely. At the beginning of this year it was 7,043. But some of these applications are so old (some of them go back to 1871) that they may be considered debarred. Thus it is impossible to say with exactitude what the number of applicants is, but it is considerable.

Immediately after the ministry of public instruction in the order of the manufacture of the unclassed comes the department of posts and telegraphs. For a long time this department has been hospitable to women.

The postal clerks, often daughters of old officers or functionaries, form an aristocracy in comparison with the telegraph operators and especially the telephone operators, who are recruited largely from the masses. So applications for these positions abound. Figures, of which I think I can guarantee the exactness, will give an idea of the sharpness of the competition. Two months ago a competitive examination was opened. The number of admissions had been limited in advance to 200. Nevertheless nearly 5,000 requests for admission to the examination were received.

The minister of finances employs also a certain number of women.

In addition to these three great departments of public instruction, posts, and finances, there is also a certain number of industrial or financial societies which employ women, some of them having a character in a certain degree public, like the Bank of France, others being, on the contrary, private societies, like the Crédit Lyonnais, the General Society, the Discount Bureau, and certain railroad companies.

At the Bank of France there are at this time about 6,000 applications for 330 positions. The number of nominations per year does not exceed twenty or twenty-five.

At the Crédit Lyonnais the number of applications is about seven or eight hundred a year. About eighty or a hundred nominations are made, or about one nomination for eight applications. The total number of applications must reach almost the same figures as for the Bank of France.

At the General Society the number of applications represents an annual average of 240 to 250. The average of admissions is sixty-four, or one out of four. According to this proportion the stock of accumulated demands must amount to a thousand.

At a recent date the number of applicants at the discount office amounted to 417. This office has employed women only four years and has never named more than twenty-five a year.

It must be taken into account that even those who are admitted to positions are not taken in at first in a definite fashion and for the whole year. They commence by being employed as assistants at the time of the busy seasons. Their term of probation lasts about sixteen months.

Certain private companies have also employed women in their offices for some time. The Orleans Company employs in its different services 192 women, recruited exclusively among the wives, widows, or daughters of agents. Even thus limited, the number of applications was, at a recent date, 626. Scarcely more than seven nominations per year are made.

A last perspective has been open for some years to the eyes of young girls somewhat intelligent and ambitious, that of employment in the great stores. In the stores of the Louvre there are no less than a hundred applications for each vacant place. No doubt it is the same at the Bon-Marché and in the other great stores which have the merited reputation of treating

their feminine *personnel* with regard and assuring it certain advantages.

To sum up, what is the number of the unclassed? All pretensions of exactitude here would be ridiculous. Nothing is as easy as to give figures, nothing is as difficult as solidly to establish them. It would not be possible to obtain the exact number of those out of employment by adding together the figures given, for doubtless the same person is an applicant for numerous positions. All I am able to say is that, according to the information I have grouped, I estimate at fifteen or twenty thousand approximately the number of young girls in Paris alone who are striving for any employment whatever, a thing they will perhaps never obtain. How do they live while waiting? Partly at the expense of their families, if they have them; partly from meager wages which they may draw from a manual trade at which they are necessarily inexpert.

What are then the charms which make the condition of employee so attractive to the eyes of the young daughter of the people, and what are the causes of this keen competition?

That which draws young girls toward the condition of employee is not the salary; it is mediocre at the beginning, not exceeding sixty cents a day save at the Bank of France, where it is a little higher. Every two years if the work is satisfactory it is increased five cents until it reaches eighty cents or, at the most, ninety cents, a mark that it never goes beyond save at the Bank, where certain privileged ones may attain to a dollar and twenty cents a day, but after twenty-five years' service. Doubtless this salary of sixty to eighty cents is superior to that of the linen-drapers and equal to that of the ordinary dressmakers. But the skilful dressmakers, the milliners, and the florists obtain an equal and even superior salary. There is then no profit on this side.

Nor is it the nature of the work nor the sort of life which attracts. In the making of a hat or a wreath of flowers, in the preparation of a ball dress, there is a place for skill, imagination, art. On the contrary, to reckon coupons or add figures in an office, usually by gaslight, and that all day long, all one's life, is one of the most wearisome tasks that can be imagined. And then the discipline of an office is otherwise more severe than that of a dressmaking or millinery shop.

Nor is it the indirect advantages that some of these administrations grant their employees—restaurants where they can dine cheaply, free care of a physician in case of sickness, an annual vacation under pay. Without counting that these advantages are not accorded by all societies, they are offset and more too by other difficulties of life.

Two things draw young girls, if I have understood them, toward this ungrateful condition, and these two things are to their honor. The first is security. The Parisian workwoman when she is industrious has fear of a standstill, of the dead season. She knows that in most industries where women are employed the work is excessive at certain times of the year while at others it is absolutely wanting. She lives in a perpetual fear that some day or other her means of gaining a living will fail her, and that after having been over-driven several weeks she will remain idle several months. This fear of a standstill makes many adopt from preference a sort of work where salaries are lower but where the dead season is less to be feared. Once entered into a bureau, if she does her work conscientiously a girl has a position for life. The administration on which she depends is perhaps more rigid than paternal, but it is absolutely just. For advancement it takes account of nothing except marks and time of service.

A consideration of another sort equally moves young girls toward administrative occupations, whether the situation sought depends on the state or on private societies. In ceasing to be a workwoman in order to become an employee, a girl mounts in rank in her own eyes. She was one of the masses, she now becomes one of the next higher class. If the administration which employs her depends upon the state,

she almost considers herself a public functionary.

Such are the considerations which draw very many young girls toward scarcely open and already encumbered careers. But for one employee who succeeds, how many remain on the road and fare miserably! How many knock for years at the door without being able to pass through it, and thus increase the category of the unclassed.

To render assistance to these unfortunates many charitable organizations have been formed. The Society for the Emigration of Women to the colonies has this as one of its principal aims.

In order that a colony may prosper and be developed, it is not sufficient that it offer an opening for those who, crowded in the ranks of our old society, have not succeeded in cutting a way for themselves, or yet for those whose activity, zeal, and spirit of enterprise would not be able to accommodate themselves to the nerveless, prosaic conditions of our modern life. It must also increase, on the spot, by the normal development of the population. And this is impossible unless men and women are found in the colony in about equal proportions.

In Tunis, the proportion of women to men is satisfactory enough, 7,438 women and 8,769 men, or forty-six women and fifty-four men per one hundred inhabitants. The French population in Tunis is increasing rapidly. Unfortunately the situation is altogether different in the other colonies.

In New Caledonia, for example, the masculine population was 6,111 and the feminine only 2,950. It is true these figures are very old, going back to 1887, and it is affirmed that the population in New Caledonia has increased very much in the last few years, so that it is to-day about 13,000 or 14,000, and the proportion of men to women about sixty to forty per cent. But these are only conjectures and in any case the deficit is patent.

At Tonquin, the European civil population was composed in 1894 of 1,494 men and 416 women. In 1896 it was 2,779. The official documents do not give the proportion of women at the later date, but those best informed estimate it at thirty per cent. In Anam the proportion of women would not exceed twenty per cent.

If most of our colonies lack women and their development is sensibly retarded on this account, how can women be influenced to go there? That is the question that the French Colonial Union proposes to solve. The means it has found has been to create a society for feminine emigration. If there is a famine of women in the colonies there is a plethora in France, at least in certain professions. The unclassed, the number of whom we have just considered, might they not find here an opening?

The French Society for the Emigration of Women has not encountered either in the colonial world or the charitable world the support on which it believed it might count. The charitable world has not comprehended the interest. The colonial world, which at first testified some sympathy, quickly became disinterested. Its existence would not have been able to run more than a few months beyond the date of its birth if it had not been sustained by the energy and devotion of a woman of great intelligence, who consecrated herself entirely to it. Thanks to her incessant activity, certain interesting results may be considered as already acquired.

One of the principal objections that was made to the creation of the society was this: No women will be found willing to go to the colonies. If French men are attached to their hearths, French women are more so. Not a respectable woman will signify a desire to emigrate. To this objection, experience has already replied in a victorious fashion. The society reckons little more than six months of existence. During these six months it has received not less than 575 applications, which makes an average of almost one hundred a month. These applications, after inquiries have been made, have been recognized as coming from persons perfectly respectable, who, struggling with the worst difficulties of life, hoped to find better fortune in the colonies than in the mother country. In this number women belonging to the intellectual professions

very much exceed those belonging to the manual professions.

These figures show that if our colonies have need of women, they may in all security turn to the Society of Emigration. The society will furnish them, worthy of that name.

What welcome have the colonies made to these offers? At the beginning this welcome was a little cold. The colonies did not have confidence in the new article of exportation that it was proposed to send them. Little by little, however, in measure as the end pursued by the society has been better comprehended, confidence has come, and offers also, but in a number still insufficient, thirty-nine only. The difficulty arises especially from the fact that the offers do not correspond to the demands. The colonists are offered teachers, governesses, and dressmakers. They demand cooks and waiting maids. Now, cooks and waiting maids are not disposed to leave France, where they believe they will always find situations. However, the efforts of the society have not been in vain. Without speaking of a certain number of affairs in process of negotiation, thirty persons have been sent to the colonies, where they have found advantageous situations. New Caledonia and Tunis have absorbed the greatest number; that is to say, contrary to what one might think, the colonies where the proportion of women in relation to men is greatest. Most of the women that the society has been able thus to provide for have been snatched from dolorous, almost tragic conditions.

From the charitable standpoint the society has, then, already proved itself; contrary to what was prophesied by some, it found a clientage. To this clientage it has already rendered signal service. But can it render this at present to the colonies themselves? Can it, as its founders have hoped, contribute to their peopling? This is another question.

In counting upon the emigration of women to hasten the peopling of our colonies the founders of the Society for Emigration have, I think, obeyed an idea not altogether just. To make use of a familiar expression, they have put the cart before the horse. In the colonies where social and family life is already sufficiently developed, as in Tunis and even in New Caledonia, women may find employment. In those where the masculine population is sensibly in excess, it is peculiarly difficult to assure them a place, and as to sending them there at hazard with the chance of their meeting a husband, no one thinks of it. Rightly, the society has never wished to become a matrimonial agency. Not that it is not sometimes asked to be. I have seen as many as fifteen letters in which, very worthily, very simply, young girls recount the difficulties of their position, the impossibility in which the absence of any dowry puts them of finding a husband in France, and ask if there would not be a settling possible in the colonies for young girls, cheerful, robust, and by no means shirks.

Very much more rarely a brave colonist asks if a woman would not wish to come and partake of his solitude. But the society does not give heed to these overtures except in circumstances altogether exceptional.

The colonials of France would do wrong, I fear, to count upon the society as a means of peopling the colonies or swaying men. When the population of these colonies shall be increased by the emigration of entire families, by the normal development of the population already installed, then, to fill certain employments suited to single women, it will be able to turn to the Society for Emigration. But so long as the colonies continue to serve as the field of activity for a certain number of celibate colonists who make the sacrifice of going there to pass ten or twelve years in order to make a fortune and amass money, with the idea of coming back some day to spend this money in the metropolis, they will have no notion of turning to the Society for Emigration, for colonists of this sort do not care to burden themselves with a wife and a family. In short, the Society for the Emigration of Women will be able to profit by colonial expansion. I doubt if it will be able to aid it.

HISTORY AS IT IS MADE.*

Formal End of War with Spain.

War with Spain—114 days long—formally came to an end on the 12th of August, when the following protocol, defining the preliminary agreement for the establishment of peace, was signed by Jules Cambon, representing Spain, and Secretary Day of our State Department:

Spain will renounce all claim to all sovereignty over and all her rights over the island of Cuba.

Spain will cede to the United States the island of Puerto Rico and the other islands which are at present under the sovereignty of Spain in the Antilles, as well as an island in the Ladrone archipelago, to be chosen by the United States.

The United States will occupy and retain the city and bay of Manila and the port of Manila pending the conclusion of a treaty of peace, which shall determine the control, disposition, and form of government of the Philippines.

Spain will immediately evacuate Cuba, Puerto Rico, and the other islands now under Spanish sovereignty in the Antilles. To this effect each of the two governments will appoint commissioners within ten days after the signing of this protocol, and those commissioners shall meet at Havana within thirty days after the signing of this protocol, with the object of coming to an agreement regarding the carrying out of the details of the aforesaid evacuation of Cuba and other adjacent Spanish islands; and each of the two governments shall likewise appoint within ten days after the signature of this protocol other commissioners who shall meet at San Juan de Puerto Rico within thirty days after the signature, to agree upon the details of the evacuation of Puerto Rico and other Spanish islands in the Antilles.

Spain and the United States shall appoint to treat for peace five commissioners at the most for either country. The commissioners shall meet in Paris on October 1, at the latest, to proceed to negotiations and to the conclusion of a treaty of peace. This treaty shall be ratified in conformity with the constitutional laws of the two countries.

Once this protocol is signed hostilities shall be suspended, and to that effect orders shall be given by either government to the commanders of its land and sea forces as speedily as possible.

WILLIAM R. DAY.
Head of the American Peace Commission.

Dewey First and Last.

Admiral Dewey won the first great victory of the war and with the aid of military reinforcements he was the last victor. Allowing for the difference in time between Manila and Washington, Manila was captured on the same day the peace protocol was signed, although it was August 13 at the Philippine capital and August 12 at ours. News of the signing of the protocol and orders suspending hostilities reached neither the Spanish nor American commands at Manila until after the city had surrendered and the American flag had been hoisted. Admiral Dewey had maintained his command of the situation most admirably from the 1st of May, when he destroyed Montojo's fleet; and the various military expeditions despatched from this country under command of

* This department, together with the book "Europe in the Nineteenth Century," constitutes the special C. L. S. C. course Current History, for the reading of which a seal is given.

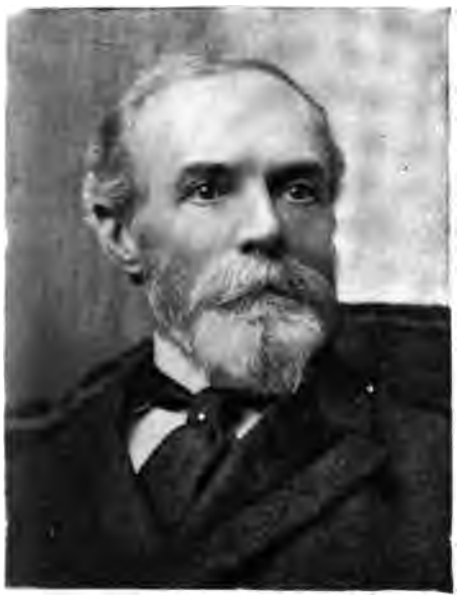
SENATOR CUSHMAN K. DAVIS, OF MINNESOTA.
American Peace Commissioner.

Major-General Merritt were effectively managed. On August 7 notice was served on the Spanish commander of Manila to remove non-combatants; on the 9th surrender was refused and the Americans declined to give time for further consultation with Madrid; on the 13th the navy opened fire on the Spanish line, and the city and its defenses capitulated after an assault of several hours' duration. The American loss was five killed and forty-three wounded. Brig.-Gen. Elwell Otis was assigned to command as military governor. General Aguinaldo, leader of the Philippine insurgents, who had subdued most of the territory adjacent to Manila and proclaimed himself dictator of a Philippine republic, gave up positions of military advantage to our troops but took no part in the assault. The insurgents were kept out of the city, and it was later reported that Aguinaldo had appealed to the powers for recognition of the republic.

Conquest of Puerto Rico. The protocol of peace cut off General Miles' nineteen-day campaign in Puerto Rico, which had consisted of an unbroken succession of successful movements. Our troops were advancing toward San Juan from Arecibo on the north and Ponce and Guayama on the south coast, and with the exception of a few minor engagements, occupation by our forces of all the principal cities, except the capital, was heartily welcomed by the Puerto Ricans. About six thousand troops have returned to the United States and twelve thousand remain to garrison the island.

Peace Commissions. Although the protocol suspended hostilities, permanent establishment of peace was not to be secured in a day. For the immediate evacuation of Cuba and Puerto Rico commissions were promptly appointed and they entered upon their by no means easy labor in September. The United States was represented at Havana by Maj.-Gen. James F. Wade (commander at Tampa), Admiral William T. Sampson, and Maj.-Gen. Matthew C. Butler. Spain's commissioners were Gen. Gonzales Parrado, Capt. Pastor Landera, and Marquis Montoro. To San Juan the United States sent Maj.-Gen. John R. Brooke (of General Miles' expedition), Admiral W. S. Schley, and Brig.-Gen. Wil-

SENATOR WILLIAM P. FRYE, OF MAINE.
American Peace Commissioner.



WHITELAW REID.
American Peace Commissioner.

liam W. Gordon. The Spanish commissioners were General Ortepa, Captain Vallarino, and Señor Aguila.

The peace commissioners, five for the United States and five for Spain, are to meet in Paris before October 1, under the provisions of the protocol. The American delegates are: W. R. Day, who resigned the portfolio of secretary of state to lead the American delegation; Senator Cushman K. Davis, of Minnesota, chairman of the Senate Committee on Foreign Relations; Senator W. P. Frye, of Maine, of the same committee; Whitelaw Reid, editor of the *New York Tribune* and ex-minister to France, and Senator George Gray, of Delaware. Spain's delegation is more incomplete, several appointees having refused to serve. By way of preparing for the diplomatic encounter, Premier Sagasta convoked the Cortes and asked for legislation permitting the alienation of territory. Sessions of the Cortes were secret and press reports of the debates were prohibited.

A New Secretary of State. Col. John Hay has been called from his ambassadorship to England to take the office of secretary of state, vacated by Judge Day's acceptance of the leadership of the American members of the Peace Commission. Mr. Day's services to the president and this country during the critical period of Spanish complications are universally appreciated. His preference for returning to law practice in Ohio after he shall have seen peace consummated does not detract from fame worthily earned. His successor, Mr. Hay, possesses high literary reputation, being popularly known as the joint author with J. G. Nicolay of the "Life of Lincoln," served as private secretary and aide to President Lincoln from 1861 to 1865, was in diplomatic service 1865–70, was assistant secretary of state 1879–81, has been a member of the staff of the *New York Tribune*, and has won distinction as ambassador to England. He is a native of Illinois and fifty-nine years old.

Aftermath of the Santiago Campaign. The home-coming of our troops after the surrender of Santiago was followed by a tremendous storm of criticism in the press directed against the War Department, head and

SENATOR GEORGE GRAY, OF DELAWARE.
American Peace Commissioner.

branches, for what was deemed unnecessary suffering of the men in the Santiago campaign and the camps established in the United States. The responsibility for deficiencies in artillery, food, and medical supplies at the front has not been definitely fixed, to date. Accounts of suffering in field and hospital were harrowing, although the heroism of the men was abundantly shown. Sick troops began to arrive at Montauk, L. I., before adequate accommodations had been completed, and accounts of the suffering of the men crowded on several of the first transports were heart-rending. The weakened condition of the troops, the alleged lack of proper food, ice, medical attendance, supplies, etc., stirred up great indignation, which was distributed upon the military authorities from the president down. Attacks centered on Secretary Alger's conduct of the War Department. Secretary Alger's defense was, in effect, that the enormous task of handling an emergency army of 275,000 men—increased from less than 30,000—had been underrated by the public; and that conditions complained of were greatly exaggerated by the newspapers. He visited the camp at Montauk, discovered some deficiencies which he ordered remedied, but declared it to be on the whole more satisfactory than he expected. President McKinley also visited this camp and addressed the soldiers. Orders for mustering out many regiments from the different camps have been given.

MAJ.-GEN. JAMES F. WADE.
Chairman United States Cuban Commission.

MAJ.-GEN. JOHN R. BROOKE.
Chairman United States Puerto Rican Commission.

Meantime differences between heads of bureaus, and between General Miles, General Shafter, Admiral Sampson, and Secretary Alger found their way into print and emphasized the newspaper demand for a thorough congressional investigation of the conduct of the war. The American loss at Santiago was reported as 1,595 killed and wounded (231 killed). The *Chicago Tribune*, the first week in September, had secured the names of 1,284 men who had died of disease in camp in Santiago, on transports, and in camps and hospitals in the United States. The New York *Sun*, however, points out from the records of the

Civil War that twice as many Union soldiers died of disease as were killed outright in action or afterward died of wounds.

The Czar as a World Peacemaker.

It was feared at one time that the Spanish-American War might result in a general European conflict. Strangely enough, it has been followed by a proposal for a universal peace conference from the government which has the largest standing army in the world. Nicholas II., who became czar of Russia four years ago and is but thirty years of age, produced a profound international sensation by ordering Count Muravieff, his foreign minister, on August 24, to hand to all foreign diplomats at St. Petersburg a note of which the principal points are the following:

CZAR NICHOLAS II.

In the course of the last twenty years the longing for general appeasement has grown especially pronounced in the conscience of civilized nations, and the preservation of peace has been put forward as an object of international policy. It is in its name that great states have concluded among themselves powerful alliances and have developed in proportions hitherto unprecedented their military forces.

The financial charges following the upward march strike at the very root of public prosperity. The intellectual and physical strength of the nations' labor and capital are mostly diverted from their natural application and are unproductively consumed. National culture, economic progress, and the production of wealth are either paralyzed or checked in development.

It appears evident that if this state of things were to be prolonged it would inevitably lead to the very cataclysm it is desired to avert, and the horrors whereof make every thinking being shudder in advance.

To put an end to these incessant armaments and to seek the means of warding off the calamities which are threatening the whole world—such is the supreme duty to-day imposed upon all states.

Filled with this idea, his majesty [the czar] has been pleased to command me to propose to all the governments whose representatives are accredited to the imperial court the assembling of a conference which shall occupy itself with this grave problem.

From a humanitarian point of view this document is historic and unanswerable. That it should be issued at a time when international rivalry in the far East seemed to render war almost inevitable between Great Britain and Russia, heightened its sensational effect. Coming from such a source, the proposals could not be ignored, however much the czar's motives were questioned; his empire includes one seventh of the earth's land surface, with an estimated population of one hundred and twenty-nine millions. Sweden was the first European government to announce its willingness to participate in the proposed conference. The European press in general adopted a cynical tone in discussing the proposal and many American papers did the same. They point out that no force exists to enforce international decrees, and combinations between participating governments, for political ends, would make them an empty form. Nevertheless, the czar received an immense amount of commendation for "the noblest exercise of imperial prerogative in all human history."

A Canadian-American Commission.

At a time when the tone of Anglo-American relations was remarkably friendly, it seemed peculiarly fitting that a Joint High Commission should assemble in Quebec to con-

SENATOR CHARLES W. FAIRBANKS.
Chairman American Delegation at Quebec.

sider questions of difference between Canada and the United States. The number and nature of the subjects to be considered were such as to command abilities of a high order on the part of the commissioners selected to represent the parties in interest. Among them are the following:

1. The controversy in respect to the fur seals in Bering Sea and the waters of the North Pacific.
2. Provisions in respect to the fisheries off the Atlantic and Pacific coasts and in the waters of their common frontier.
3. Provisions for the delimitation and establishment of Alaska-Canadian boundary by legal and scientific experts if the commission shall so decide.
4. Provisions for the transit of merchandise to or from either country across intermediate territory of the other.
5. The question of alien labor laws applicable to the subjects or citizens of the United States or Canada.
6. Mining rights of the citizens or subjects of each country within the territory of the other.
7. Such readjustment and concessions as may be deemed mutually advantageous of customs duties applicable in each country to the products of the soil or industry of the other upon the basis of reciprocal equivalents.

Sessions of the commission (which are secret) opened August 23, and are likely to continue, with recesses, for many weeks. Canada's importance in an independent sense is recognized in the appointment by the home government of four Canadians out of six members. Lord Herschell, ex-lord chancellor of England, chairman of the British and Canadian delegation, was chosen as chairman of the Joint Commission. The Canadian government appointed Sir Wilfred Laurier, premier, Sir R. J. Cartwright, minister of trade and commerce, Sir Louis H. Davies, minister of marine and fisheries, and John Charlton, member of Parliament. Sir James T. Winter, premier, represents Newfoundland. The United States delegation, appointed by the president, consists of Senator Charles W. Fairbanks, of Indiana, chairman; Senator George Gray, of Delaware, Representative Nelson Dingley, of Maine (chairman of the House Committee on Ways and Means), Gen. John W. Foster, formerly secretary of state and ex-minister to Russia, Reciprocity Commissioner John W. Kasson, of Iowa, ex-minister to Germany and Austria, and T. Jefferson Coolidge, of Massachusetts, ex-minister to France.

LORD HERSCHELL.
Chairman British and Canadian Delegation at Quebec.

Khartoum Retaken. Khartoum, in the Soudan, has been retaken by an Anglo-Egyptian army, thirteen years after

Gen. "Chinese" Gordon perished there at the hands of the Dervishes. General Gordon was killed after withstanding a siege of nearly a year without reinforcements, in 1885, since which time the Mahdi and his followers swept over the Soudan. About two years and a half ago an Anglo-Egyptian expedition, taking advantage of the Mahdi's death, was organized for an advance along the Nile to retake the land. Gen. Sir Herbert H. Kitchener, in command of ten thousand British and fifteen native troops under British officers, slowly but steadily moved forward, according to the state of the Nile River, under conditions with which those of our campaign at Santiago hardly stand comparison. Early last month the objective point was reached, and Omdurman and Khartoum were taken (September 4–5), the loss of the Dervishes being reported at eleven thousand killed, sixteen thousand wounded, and four thousand taken prisoners; the British loss was about two hundred. English control in Africa is thus restored from the mouth of the Nile to within five hundred miles of British possessions stretching northward from Cape Town.

Dreyfus Again. The Dreyfus case gives France no rest. The ways of French military justice, which seemed past finding out, have revealed themselves in most dramatic fashion, and a new trial for the prisoner on Devil's Island appears to be inevitable. Captain Dreyfus was condemned for the treason of conveying information to foreign governments, on evidence never made public "for state reasons." Émile Zola accused the War Department of making Dreyfus a scapegoat without evidence, and he is himself a fugitive from France to escape imprisonment for libel. To meet public clamor against the alleged injustice to Dreyfus, M. Cavaignac, French minister of war, last July, read parts of three letters to the Chamber of Deputies, which he declared confirmed Dreyfus' guilt beyond doubt. One of these letters incriminated Dreyfus by name, but an investigation proved that this letter was a forgery and showed that the other two had no bearing on the case. It was the fortune of Colonel Picquart, who had lost his position through his support of Zola, to see his successor, Lieutenant-Colonel Henry, confronted with such proof, on August 31, that he confessed to forging the letter. Next day Colonel Henry committed suicide.

The forged letter was not the original *bordereau* on which Dreyfus was condemned and which it is claimed cannot be published for reasons of state, but the revelation of the means used to make the public believe him guilty throws universal doubt on the justice of the original condemnation and the character of the military administration. Colonel Henry's suicide was followed by the resignation of General de Boisdeffre, chief of the staff of the French army, the resignation of M. Cavaignac, minister of war, and the disappearance of Count Esterhazy. And the end is not yet.

Queen of the Netherlands. Holland, officially the Netherlands, enthroned a young queen last month with incidental

WILHELMINA HELENA PAULINE MARIA.
Queen of the Netherlands.

ceremonies stretching over a period of three weeks. Wilhelmina reached the legal age of eighteen years on the 31st of August and issued a proclamation expressing gratitude for the love of her people and pledging herself to observe justice and contribute her efforts to increasing the intellectual and moral welfare of the whole people. Six days later the enthronement (distinguished from a coronation) took place in Amsterdam. In a brief inaugural address she assumed sovereignty of a nation "small in numbers but great in virtue of its strength of character," taking the oath of office, like the president of the United States, to obey and maintain the constitution and defend the liberties of the people, and the members of Parliament swore loyalty to the queen. Wilhelmina will reign over about 4,700,000 democratic Hollanders, in an area slightly larger than that of Maryland, and over say 32,000,000 subjects in colonies.

HON. GEORGE N. CURZON.
Viceroy of India.

Viceroy of India. Indian rule comes into comparison with that of the Netherlands by reason of the recent appointment of the Right Honorable George N. Curzon as viceroy and governor-general. Mr. Curzon is thirty-nine years of age and has an American wife, the daughter of L. Z. Leiter of Chicago. He has been a member of the British Parliament since 1886 and served as under-secretary of state for India and for foreign affairs. Several books on eastern questions have given him considerable reputation and his appointment is credited to the British advocates of a vigorous opposition to Russian advances southward. Mr. Curzon's appointment may not continue for life, but during his term he will be vice-king of one hundred times the territory ruled by Queen Wilhelmina and a population of some 288,000,000 souls.

In Samoa. The death of Malietoa, king of Samoa, revives interest in a group of Pacific islands where the United States, Great Britain, and Germany have practically exercised joint control for nearly a decade. The Berlin Conference of 1889 declared the islands to be independent neutral territory, and consuls of the three signatory powers maintain jurisdiction through local government machinery. This method has occasioned some friction, and alleged differences regarding the succession to Malietoa have caused rumors of the partition of the group. A Samoan justice has prepared a memorial on American interests and measures have been taken to further the long-delayed development of our coaling station at Pago-Pago on the island of Tuitwila.

C. L. S. C. OUTLINE AND PROGRAMS.

OUTLINE OF REQUIRED READING.

FOR OCTOBER.

First Week (ending October 8).

"Twenty Centuries of English History." Chapters I. and II.

"Europe in the Nineteenth Century." Chapters I. and II.

In THE CHAUTAUQUAN:

"English Colonization in the Western World."

Second Week (ending October 15).

"Twenty Centuries of English History." Chapter III.

"Europe in the Nineteenth Century." Chapters III. and IV.

In THE CHAUTAUQUAN:

"William Pitt."

Third Week (ending October 22).

"Twenty Centuries of English History." Chapter IV.

"Europe in the Nineteenth Century." Chapters V. and VI.

In THE CHAUTAUQUAN:

"The Growth of Chemical Science."

"Electrical Manufacturing Interests."

Fourth Week (ending October 29).

"Twenty Centuries of English History." Chapter V.

"Europe in the Nineteenth Century." Chapters VII. and VIII.

In THE CHAUTAUQUAN:

"Opening the Door."

"God is a Spirit."

"The Cathedrals of England."

FOR NOVEMBER.

First Week (ending November 5).

"Twenty Centuries of English History." Chapter VI.

"Europe in the Nineteenth Century." Chapters IX. and X.

In THE CHAUTAUQUAN:

"English Colonization in the Old World."

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FOR OCTOBER.

First Week.

1. Welcome Address by the Leader.
2. Enrollment of New Members.
3. The Lesson.
4. A Paper—Geographical evidences of French and Spanish explorations in North America.
5. Geographical Exercise—Locate the colonial possessions of Great Britain in the New World and give brief accounts of their natural resources.
6. Essay—Naval power and the French Revolution.

Second Week.

1. The Lesson.
2. Essay—The Tuileries.
3. A Paper—The Napoleonic era.
4. Literary Study—The legends of King Arthur.
5. Essay—Myths of the Northmen.

Third Week.

King Alfred Day—October 28.

An earthly immortality belongs to a great and good character. History embalms it; it lives in its moral influence, in its authority, in its example, in the memory of the words and deeds in which it was manifested; and as every age adds to the illustrations of its efficacy, it may chance to be the best understood by a remote posterity.—*Edward Everett.*

1. A Talk—Biographical facts and traditions.
2. Essay—England before King Alfred's reign.
3. Essay—King Alfred as a civilizer.
4. Essay—King Alfred's military campaigns.
5. Contrasted Character Study—Alfred the Great and Charlemagne.

Fourth Week.

1. The Lesson.
2. A Paper—The English Church before the twelfth century.
3. Book Review—"Hereward the Wake," by Charles Kingsley.
4. A Political Study—The monarchy and the republic.
5. A Paper—"The Canterbury Tales."

FOR NOVEMBER.

First Week.

1. The Lesson.
2. A Paper—England's contributions to the crusades.
3. A Talk—The people of Austria-Hungary.
4. A Paper—Literature and art in early Italy.
5. Geographical Study—Africa and its political development.
6. General Discussion—The important events of the week.

A few words may be necessary to explain to the new circles the purpose of this department of THE CHAUTAUQUAN:

The *Outline of Required Reading* indicates the

lesson for each week, and the reader will find it an easy task to complete the year's work if the assignment is closely followed.

The *Suggestive Programs* are intended to aid the circles in making each weekly meeting interesting and helpful. The subjects proposed for presentation are therefore closely correlated with those of the required reading, and each essay, paper, and talk, as well as the lesson of the week, should be thoroughly discussed. The circles have the widest latitude possible in the matter of following the programs; they may be entirely rejected, altered to suit the particular needs of a circle, or used as printed.

The change in the next division of this department of THE CHAUTAUQUAN is not so radical as it at first may appear. A careful examination of the *Syllabus of Required Reading* will reveal the fact that it has four component elements: (1) a general outline of the required reading; (2) the explanations and notes formerly included in the *C. L. S. C. Notes and Word Studies;* (3) questions for review, the answers to which the reader can easily and most profitably search out for himself; and (4) the *Search Questions*, previously published as *The Question Table*, which, it is hoped, will induce the reader to pursue still further the subjects treated in the text-books. This new arrangement has the obvious advantage of so systematizing the subject matter of the required reading that the student can quickly review the month's work.

In the *C. L. S. C. Classes* and *Local Circles* are interesting and inspiring reports from C. L. S. C. workers, which show what is being done by this branch of the Chautauqua System of Education in all parts of the world.

SYLLABUS OF C. L. S. C. READING.

REQUIRED READING IN THE TEXT-BOOKS.

"TWENTY CENTURIES OF ENGLISH HISTORY."

I. THE HOME OF THE ENGLISH.

1. The influence of physical conditions on national development (p. 11).

2. The British Isles (p. 12).

"Calais" [kă-lā'] is a strong fortress.

"Fingal's Cave" is over two hundred feet long, formed of high, basaltic pillars, between which are numerous stalactites. The floor is covered by the sea to a depth of twenty feet at low tide, and the entrance is sufficiently large to admit small boats except at high tide.

3. Great Britain (pp. 13–16).

(1) Area.

(2) Divisions.

(3) Mountains.

(4) Rivers and lakes.

(5) Climate.

"Mere" [mēr], lake, *e. g.*, Windermere, Thirlmere, etc. A group of English poets is known as the "Lake Poets," from having resided in the mountainous lake district of England. For an account of them see Beers' "From Chaucer to Tennyson," Chap. VII.

"Ouse" [ooz].

4. A general survey of Great Britain (pp. 17–27).

(1) The shires.

"Shire" [shēr or shīr, except in compositions usually pronounced shīre in Great Britain]. A part cut off, a division; derived from the Anglo-Saxon *sceran*, to cut.

The "Rubicon" is a small river of Italy, which formed the boundary between Italy and Cisalpine Gaul, and which was made famous by Cæsar's passage across it on his march toward Rome in 49 B. C., an act which amounted to a declaration of war. So the Tweed marking the boundary between England and Scotland is very appropriately mentioned as the "English Rubicon."

"Leicester" [les'ter].

"Robin Hood" was a mythical hero and noted outlaw of England, supposed to have lived near the close of the twelfth century. He with his band lived in the woods and robbed the rich, killing no one unless in self-defense.

"Bury St. Edmund." See page 55 of the text-book.

"Worcestershire" [woos'ter-shir].

The story of "Godiva" is told on page 63.

The origin of the expression "to send to Coventry" is variously explained. One version has it that the soldiers of the town's garrison were very much disliked. No intercourse was allowed between them and the citizens, and the woman who dared to speak to one of the soldiers was tabooed. So to be sent to Coventry meant to be cut off from all society, whence the present signification of the expression.

(2) The industrial centers.

(3) The agricultural districts.

REVIEW QUESTIONS.

1. What influence has England's insular position had on her national development?

2. Describe and give the reasons for the English climate.

3. Name the chief divisions of Great Britain and describe the characteristics of each.

4. Name the chief cathedral towns.

5. What ideas are associated with the following towns and cities: New Castle, Liverpool, Plymouth, Manchester, Oxford, Sheffield, Rugby, Canterbury?

SEARCH QUESTIONS.*

1. What and where are the "Maumbury Rings"?

2. Name four famous makes of English pottery and tell where they are produced.

II. ENGLAND BEFORE THE ENGLISH.

1. The earliest inhabitants of Britain (p. 28).

(1) Britons.

(2) Silures.

(3) Theory of migration.

(4) British Celts and their branches.

"Gael" [gāl].

"Cymri" [kim'ri].

2. Early chroniclers of British events (pp. 29–31).

3. Cæsar's descriptions of the country, people, and customs (pp. 31–33).

Interesting accounts of the Roman deities will be found in "Myths of Greece and Rome," by H. A. Guerber.

4. Other Roman visitors (pp. 34–35).

5. Signs of Roman civilization (pp. 35–36).

6. Roman influence on English manners and language (p. 36).

An article germane to this subject is "The Influence of Latin upon English," by Prof. William Cranston Lawton, in the June number of THE CHAUTAUQUAN.

REVIEW QUESTIONS.

1. Give an account of the early inhabitants of Great Britain.

2. What did the early historians say of the country and the people?

3. Who were the Roman invaders, and what did they accomplish?

4. What evidences of Roman civilization are to be found in Great Britain?

SEARCH QUESTIONS.

1. When did the Roman fleet first sail around Britain?

2. Where did Antoninus Pius construct a line of defense, and by what name are the remains popularly called?

III. THE ENGLISH IN BRITAIN, 410 A. D.–837 A. D.

1. The evacuation of Britain by the Romans (p. 38).

2. The Teutonic invaders (pp. 39–41).

(1) Hengist and Horsa.

"Valhalla" according to the Scandinavian myth is the hall occupied by the souls of heroes slain in battle. See "Myths of Northern Lands," by H. A. Guerber, for a description of it.

(2) Saxons.

(3) The settlement of the Angles.

(4) The Saxon Heptarchy.

3. Britain at the opening of the seventh century (p. 41).

4. German institutions, manners, and customs introduced (pp. 42–45).

"Witenagemot" [wit-e-na-ge-mōt'].

(1) English contrasted with kindred conquerors of France.

5. Missionary work (pp. 45–48).

"Aidan" [ī'dan].

"Ceadda" [keăd'dä].

6. Religious dissensions in the seventh century (pp. 49–50).

7. General survey of state development (pp. 50–52).

REVIEW QUESTIONS.

1. Why did the Romans abandon Britain and what was the result of the evacuation?

2. How did the terms England and Welsh originate?

3. Describe the manners, customs, and the political and religious systems introduced by the German invaders of Britain.

4. Give an account of the conversion of the English and of the religious controversy in the seventh century.

SEARCH QUESTIONS.

1. What and where is Kit's Coty House?

2. When, where, and for what purpose was Offa's Dyke constructed?

IV. THE ENGLISH AND THE NORTHMEN, 837 A. D.–1066 A. D.

1. The Danish invasion (pp. 53–55).

2. King Alfred and his administration (pp. 55–57).

(1) Biographical facts.

(2) Peace of Wedmore.

(3) Character of his reign.

3. Sovereigns from Alfred to Canute (pp. 57–62).

(1) Edward the Elder.

(2) Athelstan.

(*a*) His achievements.

(*b*) His title.

(3) Edmund and Edred.

(4) Edgar.

(*a*) Actual ruler.

(*b*) Officers of church and state.

(*c*) Commerce.

(*d*) Monks and monasteries.

(*e*) Disputed succession.

(5) Ethelred the Unready.

(*a*) Taxation.

(*b*) Massacre.

(*c*) Sweyn's revenge.

(*d*) Result.

4. Canute (pp. 62–63).

(1) His dominions.

*The *Search Questions* will be answered in the next number.

(2) His policy and reforms.
(3) The earldoms.
(4) Effect of his death.

5. Harold's reign (pp. 64–67).
(1) His qualifications.
(2) His promise to William of Normandy.
(3) Death of king.
(4) Crown won.
(5) Stamford Bridge.
(6) Invasion of Normans.
(7) Battle of Hastings.
(8) December 25, 1066.

REVIEW QUESTIONS.

1. Give an account of the invasions by the Northmen.

2. Characterize the reign of King Alfred.

3. Name the kings from the time of King Alfred to William the Conqueror and tell the principal event of each reign.

4. On what did William of Normandy base his claim to the English throne?

5. Describe the battle of Hastings.

SEARCH QUESTIONS.

1. What is the chief authority for the events of King Alfred's life up to 889?

2. What legal difficulty did King Alfred have to overcome in the organization of an efficient army?

V. THE NORMAN KINGS, 1066 A. D.–1135 A. D.

1. William of Normandy (pp. 68–77).
(1) Ancestry.
(2) Characteristics.
"Bayeux" [bä-yē'].
(3) Political system.
(4) Feudalism in Normandy and England.
(5) Character of Anglo-Norman system.
(6) Effect of Norman Conquest on society and church.
(7) Trouble with the barons.
(8) Domesday Book.
(9) Death of king.
"Caen" [kon].

2. William Rufus (pp. 78–81).
(1) His character and qualifications.
(2) Three factions and English liberty.
(3) System of raising revenue.
(4) Contest of church and king.
(5) Nature of administration.

3. Henry I. (pp. 81–84).
(1) Claim to throne.
(2) Attempts to win popularity.
(3) Union of Normandy and England.
(4) Chief political questions.

REVIEW QUESTIONS.

1. Give the characteristic features of the national policy and the political system of William I.

2. Compare the Norman and English feudalism.

3. Describe the contest between church and state from the accession of William I. to the death of Henry I.

4. Describe the Domesday Book.

SEARCH QUESTIONS.

1. To what does William I. owe his title of the "Conqueror"?

2. What did William the Conqueror do for the Jews?

"EUROPE IN THE NINETEENTH CENTURY."

INTRODUCTION.

1. General survey of the nineteenth century.

2. Politics (pp. 9–11).
(1) Practical motives.
(2) Influence of sentiment.

3. Results of democratic movement (p. 11).
(1) Renaissance.
(2) Protestant Revolution.
(3) French Revolution.

4. Nationality (p. 12).

5. Material development (p. 13).
(1) General survey of material progress.
(2) The common classes.

6. Spread of European civilization (pp. 13–14).

7. Political progress of Europe (pp. 14–15).
(1) Effected by revolutions.
(2) First revolution.
(3) Insurrection of 1848.
(4) Third revolution.

8. Democratic movement in Great Britain (p. 15).

PART I.—THE FIRST REVOLUTION.

Preliminary.

1. Character of revolutionary movements.

2. Society in last half of the eighteenth century.

3. French traits.

4. General character of French Revolution.

I. EUROPE UNDER THE OLD RÉGIME.

1. General survey of old Europe (pp. 19–20).

2. France the leading nation (pp. 20–26).
(1) Result of Louis XIV.'s reign.
(2) The government.
(3) Bulwarks of French monarchy.
"Canaille" [ka-nāl']. The lowest order of society; the rabble.
"Curé" [kü-rā'].
(4) The third estate.
"Taille" [tāl].
"Corvée" [kor-vā'].
(5) General view of French society.

3. The Holy Roman Empire (pp. 26–29).
(1) Character.
(2) The Diet.
(3) Languages.
(4) The government.
(5) Condition in Germany and Italy.

4. England in 1789 (p. 29).

5. International policy (pp. 29–30).

REVIEW QUESTIONS.

1. Give a general survey of continental government before the first revolution.

2. What were the three classes of society in France and what were their privileges?

3. Describe the Holy Roman Empire.

4. Compare England's condition in 1789 with that of continental countries.

SEARCH QUESTIONS.

1. In what words did an Englishman of the eighteenth century prophesy a revolution in France?

2. The influence of what three French writers can be traced in the events of the first revolution?

II. THE REVOLUTION IN FRANCE.

1. The States-General summoned (pp. 31–32).
   (1) Reason for call.
   (2) Character of assembly.
   (3) Action of the third estate.
   (4) The tennis court oath.
2. The National Assembly (pp. 32–34).
   (1) Governmental reform.
      (*a*) Abolition of feudalism.
      (*b*) Confiscation.
      (*c*) Religious liberty.
      (*d*) Constitution.
3. Work of the Legislative Assembly (pp. 34–35).
4. The war and its results (pp. 35–36).

Émigré [ā-mē-grā'], emigrant, is a term applied to the refugees from France during the Revolution. They were principally Royalists.

5. The Convention (pp. 36–37).
   (1) Republic proclaimed.
   (2) Trial and execution of the king.

"Dumouriez" [dü-moo-rya'].

   (3) Committees appointed.
   (4) Arrest of Girondist leaders.
6. The Committee of Public Safety (pp. 38–40).
   (1) Nature of authority.
   (2) Services of Carnot.

"Carnot" [kär-nō'].

   (3) The Terror.
   (4) The reaction.
7. The Constitutional Republic (pp. 40–43).
   (1) Legislative and executive powers.
   (2) Attempt at insurrection.
   (3) The new Directory.
   (4) The new force in politics.

"*Coup d' état*" [kö dā-tä'], French words meaning literally a stroke of state; a stroke of policy.

REVIEW QUESTIONS.

1. Describe the origin of the National Assembly.

2. Describe the different forms of government possessed by France from 1789 to 1799.

3. Describe Napoleon's *coup d' état*.

SEARCH QUESTIONS.

1. Who uttered the following words: "We are here by the will of the people and we will be sent away only at the point of the bayonet"?

2. What was the paper currency of the French Revolution called? On what was it based?

III. NAPOLEON BONAPARTE.

1. The Constitution of 1799 (pp. 45–46).
2. From May, 1800, to March, 1802 (pp. 46–47).
3. After the war (pp. 47–48).
   (1) Systematization of the government.
   (2) The codification of the laws.
4. The Concordat (pp. 48–49).

"Ultramontane" is from the Latin *ultra*, beyond, and *mon(t)s*, mountain, and means literally beyond the mountain; beyond the mountains for countries north of the Alps would of course be the territory south of the Alps, therefore the word in a specific sense has come to mean belonging to the Italian party in the church.

5. The renewal of war (pp. 49–52).
   (1) The strength of France.

"Lunéville" [lü-nā-vēl'], a town of France.

   (2) The cause of war.
   (3) Ulm and Austerlitz.
   (4) The Federation of the Rhine.
   (5) Jena.
   (6) Peace of Tilsit.
6. The imperial domain (pp. 52–53).
   (1) Extent.
   (2) The Continental System.
7. Napoleon's overthrow (pp. 53–57).
   (1) Spanish project.

The "Inquisition," or Holy Office, was an ecclesiastical court established in the Roman Catholic church to detect and punish heretics.

"Coruña" [ko-roon'yä].

   (2) War in 1809.
   (3) Extent of French Empire.

"Valais [vä-lā'].

   (4) Alliance with Austria.
   (5) War with Russia.

"Borodino" [bor-ō-dē'nō] is a Russian village.

   (6) German war of liberation.
      (*a*) Congress at Prague.
      (*b*) Battle of Leipzig.
8. Waterloo (p. 58).

REVIEW QUESTIONS.

1. Describe the government established by the Constitution of 1799.

2. What events led to the treaty of Amiens?

3. Describe Napoleon's method of developing the government.

4. Give an account of the series of events which resulted in Napoleon's overthrow.

SEARCH QUESTIONS.

1. When, where, and by whom was the ceremony which made Napoleon emperor of France

performed? Who placed the crown upon his head?

2. What system of national rewards for military and civil service did Napoleon institute?

IV. RESULTS OF THE FRENCH REVOLUTION.

1. The Bourbon dynasty restored (p. 59).
2. The temporary results (pp. 59–61).
   (1) The Terror.
   (2) Destruction of education and religion.
   (3) International wars.
3. The permanent results in France (pp. 62–66).
4. Results in other European countries (pp. 66–68).
5. Growth of the idea of nationality (p. 68).

REVIEW QUESTIONS.

1. What were the temporary results of the Revolution?
2. What word represents the permanent results of the Revolution in France?
3. Describe the administrative system which grew out of the Revolution.
4. In what countries was the idea of national unity aroused?

SEARCH QUESTION.

1. Under whose auspices was the festival of Wartburg held and what was its real object?

PART II.—THE REACTION AND THE SECOND REVOLUTION.

Preliminary.

1. France from 1789 to 1815.
2. Other nations in the same period.
3. Result of the second revolution.

V. THE CONGRESS OF VIENNA.

1. Three important congresses (p. 72).
2. Purpose and *personnel* of the Congress of Vienna (p. 72).

"Castlereagh" [kas-l-rā′].

3. The methods of business (p. 73).
4. Object of the Congress (p. 74).
5. The subjects of dispute (pp. 74–76).
6. The international enactment (p. 76).
7. The Vienna adjustments (pp. 77–78).

"*Casus belli*," Latin words meaning cause of war.

"Heligoland" is an island in the North Sea.

"Neuchâtel" [ne-shä-tel′] is a Swiss canton.

8. What Lodge says of this congress (p. 79).

REVIEW QUESTIONS.

1. What countries were represented in the Congress of Vienna?
2. What were the great subjects of dispute?
3. Describe the methods by which the business was transacted?
4. What disposition was made of the various political areas?

SEARCH QUESTIONS.

1. Why was Murat court-martialed?
2. Who signed the acts of the Congress of Vienna?

VI.—THE REIGN OF METTERNICH.

1. Period of prime ministry (p. 80).
2. His predominant idea (p. 80).
3. System of police espionage (pp. 80–82).

"Epimenidean sleep," a sleep like that of Epimenides, a Cretan poet, who is said to have slept fifty-seven years in a cavern.

4. His influence among the states (pp. 82–84).
5. Conference at Aix-la-Chapelle (p. 84).
6. Insurrections (pp. 84–85).
7. The monarchy of Louis XVIII. (pp. 86-87).
8. The reign of Charles X. (pp. 88–89).
   (1) Payment for confiscated lands.
   (2) Change of government.
   (3) Insurrection.

REVIEW QUESTIONS.

1. Describe Metternich's theory of government.
2. What was the Holy Alliance?
3. Give reasons for the insurrection of 1820.
4. Describe France under the royal charter.

SEARCH QUESTIONS.

1. At whose instigation was the plan of the Holy Alliance drawn up?
2. What was the real object of the alliance?

VII.—THE ORLEANS MONARCHY AND THE SECOND FRENCH REPUBLIC.

1. The Orleans monarchy (pp. 90–96).

"Jemappes" [zhā-mäp′]. A village of Belgium.

   (1) The principle of the monarchy.
   (2) The foremost politicians.

"Thiers" [tyār].

"Guizot" [gē-zo′].

   (3) Continental risings.
   (4) The king's foreign policy.
   (5) Napoleonic sentiment.

"Béranger" [bā-roN-zhā′]. A French poet.

   (6) Socialistic doctrines.
   (7) Character of Louis Philippe's government.

"*Ménage*" [me-näzh′]. Housekeeping.

"*Bourgeois*" [boor-zhwo′]. A citizen, a commoner.

"*Bourgeoisie*" [boor-zhwo-zē′]. The middle class of France.

   (8) Immediate cause of the overthrow.
   (9) Revolution of 1848.

2. The Second Republic (pp. 96–100).
   (1) The provisional government.
   (2) The National Assembly.

"Cavaignac" [kä-vän-yäk′].

   (*a*) The constitution.
   (*b*) The political parties.
   (*c*) The election of president.

REVIEW QUESTIONS.

1. Compare the Orleans government with that of the Bourbons.

2. Relate the events which led to the downfall of the Orleans monarchy.
3. For what did the constitution of 1848 provide?
4. Give an account of the election of 1848.

SEARCH QUESTIONS.

1. Between what nations was the London treaty of 1831 formed?
2. What was the subject of the treaty?

VIII. EIGHTEEN HUNDRED AND FORTY-EIGHT IN GERMANY.

1. Desire for German nationality and a constitution (pp. 101–102).

"Pickwickian sense" is a phrase meaning a merely technical or parliamentary sense. It is derived from a scene in Dickens' novel, "The Pickwick Papers," Chap. I.

(1) Renascence in Germany.
(2) Obstacles to unity (pp. 102–103).
(3) The Zollverein and Parliament (p. 103).
(4) Insurrections and results (pp. 103–107).

2. Schleswig-Holstein question (pp. 107–108).

The Salic law of succession is one of the laws in the code of the Salian Franks which forbade females to inherit certain lands, and in the fourteenth century the same law was made to apply to the succession to the crown.

3. Events in Austria (pp. 108–109).
4. The reaction (p. 109).

REVIEW QUESTIONS.

1. Explain how the idea of German unity developed.
2. How was German unity retarded?
3. What was the character of the National Assembly?
4. Explain the Schleswig-Holstein question.
5. What was the final act which prevented German unity?

SEARCH QUESTIONS.

1. What was one of the first acts of Frederick William IV. which favored German national liberty?
2. Where was the German assembly of May, 1848, opened.

REQUIRED READING IN "THE CHAUTAUQUAN."

I. "THE CATHEDRALS OF ENGLAND."

1. The educative power of cathedrals (pp. 2–5).

"Minster" originally meant monastery and afterward it was used to indicate the church of a monastery. In Great Britain such churches later became cathedrals and the word minster therefore came to mean a cathedral.

2. Description of Canterbury Cathedral (pp. 5–7).

"Douay" [doo-ā′] is a town of France.

3. Winchester Cathedral (pp. 7–8).
(1) Compared with Canterbury.
(2) Periods of church history to be studied with the cathedrals.
(3) Facts about Winchester.
4. Durham Cathedral (pp. 8–10).
5. History of Salisbury (pp. 10–11).

"Reredos" [rēr′dŏs], an architectural term applied to the ornamented screen behind an altar.

"Old Sarum," two miles from Salisbury, was an ancient Celtic fortress.

"Bailleul" [bä-yē′].

The Order of the Garter is the highest order of knighthood in Great Britain and usually consists of about fifty members, the sovereign, the Prince of Wales, twenty-four knights, and other English princes and foreign rulers who may be chosen.

"Campeggio" [käm-pej′ō].

6. Interesting facts about Ely (pp. 11–12).

II. "ELECTRICAL MANUFACTURING INTERESTS."

1. The purchase of American products for trolley roads in Great Britain (p. 13).
(1) Effect on the English.
(2) Discussions aroused.
2. Supremacy of American electrical manufactures (pp. 13–14).
3. Conditions favoring the development of electricity in America (pp. 14–15).
(1) Vastness of territory.
(2) Conduct of electrical industries by private companies.
(3) Electrical legislation in the United States.
(4) The cheap current.
4. Production in Europe and America (p. 16).
5. Signs of successful electrical investment (pp. 16–17).

III. "WILLIAM PITT."

1. The year of his birth (p. 17).

"Quiberon" [kē-broN′].

2. Pitt's childhood (p. 17).
3. From fourteen to twenty-one (pp. 17–18).
4. In the House of Commons (p. 18).

A pocket borough was a borough whose representation in Parliament was controlled by a single family or individual.

(1) His first speech.
(2) His declaration to the House.
(3) Chancellor of the Exchequer.
5. Pitt becomes prime minister (p. 18).
6. The field of greatest success (p. 19).
7. Attempts at parliamentary reform (p. 19).
8. Source of Pitt's political strength (p. 19).
9. Sentiment in regard to the French Revolution (p. 19).
10. Administration during war (p. 20).

"Spithead" is a roadstead on the southern coast of England.

The "Nore" is a part of the estuary of the Thames River.

11. Attempt to unite England and Ireland (p. 20).
12. The result of Pitt's military plans (p. 20).
13. Contemporary opinion of Pitt (pp. 20–21).

IV. "OPENING THE DOOR."

1. Two ways of viewing the possibilities of life (p. 21).
2. Ways of considering the relations of religious life (p. 22).
3. How we are to regard God, Christ, and forgiveness of sin (pp. 22–23).
4. The simplicity of religion (p. 23).
5. The result of opening the soul to God (p. 23).

V. "GOD IS A SPIRIT."

1. The nature of God and man (pp. 23–24).
   (1) The rational basis of religion.
   (2) The result of a recognition of this truth.
   (3) Relationship with God.
   (4) Intercourse with God.
2. The nature and possibilities of the spiritual life (p. 24).
3. The great example of faith (p. 24).
4. To know the extreme possibilities of one's being (p. 25).
5. The transforming power of God's spirit (p. 25).
6. What it is to live (p. 25).

VI. "THE GROWTH OF CHEMICAL SCIENCE."

1. Modern chemistry defined (p. 25).
2. Knowledge possessed by the ancients (p. 25).
3. The period of the alchemists (pp. 25–26).
   (1) The date of the period.
   (2) Search for the Philosopher's Stone.

"*Ignis fatuus*" is a Latin phrase signifying fatuous fire; figuratively, a visionary scheme.

   (3) Facts collected.
   (4) Alchemy differentiated from chemistry.

The prefix in the word "pseudo-scientist" is a combining form of the Greek *pseudos*, a falsehood. It is used in many compounds, meaning false, sham.

4. The Iatro-chemical Period (p. 26).

The prefix *iatro* is derived from the Greek word *iatros*, a physician.

5. The Phlogiston Period (p. 26).

"Lavoisier" [lä-vwä-zyā′].

   (1) The phlogiston theory.
      (*a*) The cause of its acceptance.
      (*b*) Value of the theory.
      (*c*) Effect on the science of chemistry.
      (*d*) The elements discovered in this period.

6. The results accomplished for chemical science (p. 27).
7. Lavoisier's theory of oxidation (pp. 27–28).
8. John Dalton and his theory (p. 28).
9. Gay-Lussac's discovery (pp. 28–29).

"Gay-Lussac" [gā-lü-säk′].

"Berzelius," a Swedish chemist.

"Avogadro" [äv-ō-gä′drō] was an Italian chemist.

"Ampère" [ON-pēr′]. A French physicist.

"Wollaston" [wool′as-ton]. An English chemist.

"Dumas" [doo-mä′] was a chemist and physiologist of France.

"Gerhardt" [French pronunciation, zhā-rär′; German, gār′härt]. A French chemist.

"Laurent" [lō-ron′]. A French chemist.

VII. "ENGLISH COLONIZATION IN THE WESTERN WORLD."

1. Growth of the British Empire for three hundred years (p. 29).
   (1) Area.
   (2) Population.
2. England as a colonizing nation (p. 29).
3. Discovery and settlement of Newfoundland (pp. 29-30).
4. Exploration and settlement of Canada (p. 30).
5. Capture of Quebec (p. 30).
6. Scotch migration to Canada (p. 30).
7. The Hudson Bay Company (p. 30).
8. The Bermudas (p. 30).
9. Colonization of Barbados (pp. 30–31).
10. Settlement of the Leeward Islands (p. 31).

St. Christopher is another name for St. Kitts.

"Antigua" [ăn-tē′gwā].

11. Conquest of the Windward Islands (p. 31).
12. San Salvador (p. 31).

"Nonconformist" is a term applied to the 2,000 ministers who severed their connection with the Church of England rather than comply with the terms of the Uniformity Act of 1662 which required that the "Book of Common Prayer," and that only, should be used in public worship.

13. The island of Jamaica (p. 31).
14. Trinidad (p. 32).
15. Tobago (p. 32).
16. Small area of the British West Indies (p. 32).
17. Possessions on the South American coast (p. 32).
18. History of British Honduras (p. 32).
19. The Falkland Islands (p. 32).

THE C. L. S. C. CLASSES.

1882–1902.

CLASS OF 1899.—"THE PATRIOTS."

"*Fidelity, Fraternity.*"

OFFICERS.

President—John C. Martin, New York, N. Y.

Vice Presidents—John A. Travis, Washington, D. C.; Charles Barnard, New York, N. Y.; Rev. Cyrus B. Hatch, Pa.; Frank G. Carpenter, Washington, D. C.; John Brown, Chicago, Ill.; Charles A. Carlisle, South Bend, Ind.; Edward Marsden, Alaska; William Ashton, Uxbridge, England; Miss Alice Haworth, Osaka, Japan; Miss Frances O. Wilson, Tientsin, China.

Secretary—Miss Isabelle T. Smart, Brielle, N. J.

Treasurer—John C. Whitford, Detroit, Mich.

Trustee—Miss M. A. Bortle, Mansfield, O.

CLASS EMBLEM—THE FLAG.

CLASS COLOR—BLUE.

CLASS FLOWER—THE FERN.

CLASS OF 1900.—"THE NINETEENTH CENTURY CLASS."

"*Faith in the God of truth; hope for the unfolding centuries; charity toward all endeavor.*"

"*Licht, Liebe, Leben.*"

OFFICERS.

President—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

Vice Presidents—Rev. John A. McKamy, Nashville, Tenn.; Rev. Duncan Cameron, N. Tonawanda, N. Y.; J. F. Hunt, Chautauqua, N. Y.; Morris A. Greene, Pittsburg, Pa.; Mrs. Mary H. Gardner, Kansas City, Mo.; Mrs. James H. Bentley, Ridley Park, Pa.

Secretary and Treasurer—Miss Mabel Campbell, 53 Younglove Ave., Cohoes, N. Y

Trustee—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

CLASS EMBLEM—EVERGREEN.

CLASS COLOR—GRAY.

Dear Classmates:—The members of the Nineteenth Century Class gathered at Chautauqua send you greetings and have many times wished that you had been with us this summer. We have had many pleasant meetings and delightful reunions and a bow of gray ribbon is all that is necessary to insure a warm welcome in Room Number 7. Those who have been at Chautauqua know about our classroom in Alumni Hall, which is one of the largest and best furnished rooms in the building. We share the room with the Class of '92 and they have left very little for us to do. Still there is the class' share in the building itself and many of those coming each year are contributing to this fund. We feel that the members of the class who have not been at Chautauqua will want a share in the class home, which the trustees hope to finish soon. At the last meeting the secretary presented the following plan and it was well received by those present: Each member is to try to earn at least fifty cents during the year. The money earned is to be sent to the treasurer and a record kept of how each sum was earned. This (with the names omitted, if so desired) will be read at a special meeting in August, '99. Where possible the account should be in rimes, as even work of this kind may become "a beautiful poem." One member has already earned the required amount. She did some sewing for a busy Chautauquan who could not find time to do the work herself. From now until Christmas time, every one is wishing for help in doing all kinds of work. "Be there a will, then wisdom finds a way" will prove true if you begin to watch for a way. Please send the result of your work in promptly, and where there are more than one of the Class of 1900 living in the same place, why not work together?

The class song has not been selected yet, so that you can write one if you want to be the class poet. It will be chosen next year.

Suggestions for the class pin and banner will be gladly received, as these must be ordered next year also.

The secretary will gladly explain further if you write to her and the treasurer is seldom too busy to write.

Sincerely your classmate,

MABEL CAMPBELL.

Recognition Day, 1898.

CLASS OF 1901.—"THE TWENTIETH CENTURY CLASS."

"*Light, Love, Life.*"

OFFICERS.

President—Dr. W. S. Bainbridge, New York, N. Y.

Vice Presidents—William H. Mosely, New Haven, Conn.; Rev. George S. Duncan, Washington, D. C.; John Sinclair, New York, N. Y.; Mrs. Samuel George, Wellsville, W. Va.; Dr. Eliza Mosher, Ann Arbor, Mich.; Mrs. T. S. Coleman, San Antonio, Tex.; Mrs. Miller, Jacksonville, Fla.

Executive Committee—Mrs. Ned Arden Flood, Chicago, Ill.; Prof. Henry Cohn, Evanston, Ill.; Mrs. Jamison.

Secretary and Treasurer—Miss Harriet E. Barse, 1301 Brooklyn Ave., Kansas City, Mo.

CLASS FLOWER—COREOPSIS.

CLASS EMBLEM—THE PALM.

CLASS OF 1902.—"THE ALTRURIANS."

"*Not for self, but for all.*"

OFFICERS.

President—Dr. John Henry Barrows, Chicago, Ill.

Vice Presidents—Col. Geo. W. Bain, Lexington, Ky.; Mr. A. T. Van Laer, New York, N. Y.; Mr. J. T. Robert, Chicago, Ill.; Mr. M. E. Baird, Ohio; Madame Emma D. Rupin, St. Louis; Mo.; Miss Harriet Walker, Wellesley College; Mr. Albert Watson, Mt. Vernon, Ill.; Miss Sallie Leonard, Jackson, Mich.; Miss Jewell Gould, Aspen, Col.

Honorable Vice Presidents—The Earl and Countess of Aberdeen.

Secretary—Mrs. Josephine Griffith Rabb, East Aurora, N. Y.
Treasurer—Prof. J. C. Armstrong, 530 Lincoln Ave., Pittsburg, Pa.

CLASS FLOWER—AMERICAN BEAUTY ROSE.

THE new Class of 1902 takes its place amid the ranks of Chautauqua classes with as bright hopes as ever characterized a "freshman." The membership of 1902 at Chautauqua ran well ahead of the record of 1901 a year ago, and the earnest discussions over class name, motto, and emblem developed an amount of energy and enthusiasm which speaks well for the future of the "Altrurians."

At Chautauqua, the Class of 1902 submitted successfully to its inevitable "initiation," which took place under the light of the Athenian Watch-fires in the picturesque old Hall of Philosophy. Walter Raleigh and Queen Elizabeth, Chaucer, Shakespeare, Browning, Boswell, and Johnson took possession of the rostrum for one brief half hour, and with wit and wisdom introduced the members of the new class to some of the privileges which as Chautauquans they were about to enjoy. A note of greeting from the absent class president, Dr. J. H. Barrows, was also read:

"I am confident that faithful readers will not be sorry for having entered 'the still air of delightful studies' together under the C. L. S. C. leadership. I am sure that the Chautauqua spirit will be joyfully cultivated. May inauguration night be filled with fun and fired with literary and social enthusiasm. May the olive badges soon be as thick as leaves that strew the brooks in Vallambrosa! Please give my cordial greetings to my illustrious classmates and assure them that it will be a great joy to meet them anywhere and especially at the Assemblies of '99, 1900, 1901, and 1902."

A week later, on class night, the class were officially welcomed to their club-room in Alumni Hall by the Classes of '86 and '94, who share the room with them. The 1902's were quick to appreciate the fact that the privileges of a class home were not to be lightly regarded and gladly contributed a considerable sum to add to the efficiency and attractiveness of the building. During the next four seasons at Chautauqua many members of the class will find their way to this cozy and homelike spot and feel a sense of satisfaction in knowing that here 1902 has a secure abiding place of its own.

GRADUATE CLASSES.

At the opening of a new year graduates are reminded that the special Current History Course, which has proved both profitable and popular, will be continued. This course enables graduates to keep in touch with the best thought of the times and at the same time pursue other lines of study if they feel so disposed. The Current History Course includes the department of "History As It Is Made" in THE CHAUTAUQUAN and Judson's "Europe in the Nineteenth Century." The fifty-cent fee enrolls a member and supplies him with the necessary memoranda.

CLASS OF 1898.—"THE LANIERS."

"The humblest life that lives may be divine."

OFFICERS.

President—Miss Mary H. Askew Mather, Wilmington, Del.
Vice Presidents—Rev. Robert P. Gibson, Croton Falls, N. Y.; Mrs. M. H. Parker, Pittsburg, Pa.; Miss E. G. Scofield, Warren, Pa.; Mrs. Norvin T. Harris, Lyndon, Ky.
Secretary—Mrs. Henry S. Anderson, Cleveland, O.
Corresponding Secretary—Miss Alice T. Smyth, Wilmington, Del.
Treasurer and Trustee—Mrs. Eunice S. Watrous, Brooklyn, N. Y.

CLASS FLOWER—VIOLET.

NEARLY two hundred members of the Class of '98 gathered at Chautauqua during the months of July and August. A few were unable to remain for Recognition Day, but the greater number were present in time for the baccalaureate sermon on Sunday, August 14, and the Vesper Service, Class Vigil, and other exercises of special interest to the class. The '98 Room in Alumni Hall was the scene of frequent reunions and class interest took the form in many cases of gifts for the class home. The Alleghanian Circle, of Coudersport, Pa., sent a handsome oak table. Three beautiful lamps were also contributed and a copy of the complete works of Sidney Lanier. The bust of Sidney Lanier, presented by Professor Adams, will also find its place in the class-room. The graduates set about raising their quota for the privilege of a room in Alumni Hall with great enthusiasm, that they might feel a genuine sense of ownership in their Chautauqua house. Miss J. G. Morehouse, of Syracuse, N. Y., took an excellent photograph of Alumni Hall, which any member of the class can secure for twenty cents, the proceeds all to be used for the benefit of the class. Owing to the necessary work attendant upon the securing of a professional degree, Dr. W. G. Anderson, the class president, was unable to complete his course and graduate, but the class claimed the privilege of making him an honorary member. A copy of the Recognition Day *Herald* and of the special Lanier program used at that time will be mailed to all 98's who were unable to be present at Chautauqua, and any 98's who are interested in class affairs and desire to contribute ever so little to the class-room or to its equipment will find the treasurer ready to advise them as to class needs.

CLASS OF 1897.—"THE ROMANS."

"Veni, Vidi, Vici."

OFFICERS.

President—Rev. W. P. Varner, Bolivar, Pa.
Vice Presidents—Mrs. A. E. Barbour, Bethel, Conn.; W. H. Blanchard, Westminster, Vt.; Mrs. R. F. Brophey, Brantford, Ont.; Mr. E. P. Mackie, New Orleans, La.; Mrs. J. W. Double-

day, Jamestown, N. Y.; Miss Mary W. Kimball, New York, N. Y.

Secretary—Miss Eva M. Martin, Chautauqua, N. Y.

Treasurer and Trustee—Rev. W. F. Harding, Terre Haute, Ind.

CLASS EMBLEM—IVY.

CLASS OF 1896.—"THE TRUTH SEEKERS."

"*Truth is eternal.*"

OFFICERS.

President—John A. Seaton, Cleveland, O.

Vice Presidents—Miss Sarah E. Briggs, New Haven, Conn.; Dr. W. C. Bower, Lebanon, Kan.; Rev. C. C. Johnson, Gaines, N. Y.; Mrs. Selah Brown, Fostoria, O; Mrs. J. D. Hamilton, Coraopolis, Pa.; Mrs. Anna J. Emery, Clinton, W. Va.; Mrs. Cynthia A. Butler, Pittsfield Ill.; Miss Irene D. Galloway, Fayetteville, Ark.

Corresponding Secretary—Mrs. William Epley, Allegheny, Pa.

Recording Secretary—Miss Dorothy D. McKean, Franklin, Pa.

Trustee and Necrologist—John A. Seaton, Cleveland, O.

Treasurer, Vice Trustee, and Orator—Rev. George W. Peck, Buffalo, N. Y.

Historian—George H. Lincks, Jersey City, N. J.

CLASS FLOWER—FORGET-ME-NOT.

CLASS EMBLEM—A LAMP.

CLASS OF 1895.—"THE PATHFINDERS."

"*The truth shall make you free.*"

OFFICERS.

President—Mrs. Mary E. Miller, Akron, O.

Vice Presidents—George P. Hukill, Oil City, Pa.; Miss Howard, Binghamton, N. Y.; J. A. Strayley, Brooklyn, N. Y.; Mrs. O. A. James, Rinersburg, Pa.; Robert A. Miller, Canton, O.; J. B. Morton, Tarboro, N. C.

Secretary—Miss F. M. Hasen, Chautauqua, N. Y.

Assistant Secretary and Historian—Miss S. D. Grant, C L. S. C. Office, Buffalo N. Y.

Treasurer—Raymond Macdonald Alden, Philadelphia, Pa.

Trustee—George P. Hukill, Oil City, Pa.

CLASS FLOWER—NASTURTIUM.

CLASS OF 1894.—"THE PHILOMATHEANS."

"*Ubi mel, ibi apes.*"

OFFICERS.

President—Rev. A. C. Ellis, D.D., Oil City, Pa.

Vice Presidents—Rev. A. D. Cunningham, D. D., Wheeling, W. Va.; Rev. J. B. Countryman, Gowanda, N. Y.; J. A. Moore, Pittsburg, Pa.; Mrs. Frederick Belden, Norwalk, Conn.; Mrs. Sarah J. McCulloch, Muncie, Ind.; Miss Carrie S. Hamill, Keokuk, Ia.; Mrs. A. G. Brice, Chester, S. C.; Rev. Dr. Livingston, Toronto, Can.; W. W. Phelan, Washington, D. C.; Mrs. Annie E. Boyne, New York, N. Y.; Miss M. Monroe, Southport, Conn.; Mrs. H. Stanbury, Dallas, Tex.; Rev. E. A. Parcells, East Aurora, N. Y.

Recording Secretary—Miss Caddie Whaley, Pomeroy, O.

Corresponding Secretary and Treasurer—Miss Anna M. Thompson, Norwalk, Conn.

Trustee—W. T. Everson, Union City, Pa.

Historian—Mrs. M. McCune, Columbia, Mo.

Poet—Mrs. S. D. Thurston, Dallas, Tex.

CLASS FLOWER—CLOVER.

CLASS OF 1893.—"THE ATHENIANS."

"*Study to be what you wish to seem.*"

OFFICERS.

President—Rev. M. D. Lichliter, Pittsburg, Pa.

Vice Presidents—E. Henry Levy, New York, N. Y.; Mrs. S. W. Williams, Streator, Ill.; Mrs. Robert Gentry, Chicago, Ill.; Rev. T. F. Ashton, Hamilton, O.

Secretary—Mrs. John Green, Buffalo, N. Y.

Treasurer—Prof. William H. Scott, Syracuse, N. Y.

Trustee—Dr. George E. Vincent, Chicago, Ill.

CLASS EMBLEM—ACORN.

CLASS OF 1892.—"THE COLUMBIA."

"*Seek and ye shall obtain.*"

OFFICERS.

President—T. E. McCray, Bradford, Pa.

First Vice President—Mrs. Jane Mead, Corry, Pa.

Second Vice President—Mrs. J. L. Hurlbut, New York, N. Y.

District Vice Presidents—Mrs. J. H. Vincent, Topeka, Kan.; Rev. Thomas Cardis, Batavia, N. Y.; Mrs. G. E. W. Young, Adams, N. Y.; Mrs. J. H. Fryer, Galt, Can.; Miss Maude G. Hoxsie, Knoxville, Tenn.; J. T. Barnes, Rathway, N. J.; Mrs. Frank Beard, Chicago, Ill.; Miss Emeline Rosborough, S. C.; Miss Grace Sherwood, Jefferson, O.; Miss M. E. F. Eaton, Southport, O.

Secretary—Mrs. Lilian B. Clarke, Andover, N. Y.

Treasurer and Trustee—Mr. W. J. Booth, Titusville, Pa.

CLASS FLOWER—CARNATION.

CLASS OF 1891.—"THE OLYMPIANS."

"*So run that ye may obtain.*"

OFFICERS.

President—Dr. H. R. Palmer, New York, N. Y.

Vice Presidents—Rev. J. S. Ostrander, Brooklyn, N. Y.; Rev. J. M. Durrell, Tilton, N. H.; Joseph H. Fryer, Galt, Can.; Mrs. L. E. Hawley, Buffalo, N. Y.; Miss Mary Chapman, Concord, N. C.; Mrs. Harriet Buel, Buffalo, N. Y.; Mrs. Mary Barkdull, Sidney, O.; Mrs. William Breeden, Santa Fé, N. Mex.; Mrs. J. S. Ostrander, Brooklyn, N. Y.; Mrs. George T. Guernsey, Independence, Kan.; Miss C. L. Sargeant, Brooklyn, N. Y.

Secretary—Mrs. E. C. Janes, Randolph, N. Y.

Assistant Secretary—Mrs. G. E. Foster, Evanston, Ill.

Treasurer and Trustee—W. H. Westcott, Holley, N. Y.

Historian—Miss M. A. Daniels, Chautauqua, N. Y.

CLASS FLOWERS—LAUREL AND WHITE ROSE.

CLASS OF 1890.—"THE PIERIANS."

"*Redeeming the time.*"

OFFICERS.

President—Prof. D. A. McClenahan, D.D., Allegheny, Pa.

First Vice President—Mrs. A. M. Martin, Pittsburg, Pa.

Second Vice President—Z. L. White, Columbus, O.

Secretary—Mrs. Houston, Jamestown, N. Y.

Treasurer—Mrs. Z. L. White, Columbus, O.

Trustee—Rev. Dr. H. B. Waterman, Chicago, Ill.

CLASS FLOWER—TUBE ROSE.

CLASS OF 1889.—"THE ARGONAUTS."

"*Knowledge unused for the good of others is more vain than unused gold.*"

OFFICERS.

President—W. A. Hutchinson, D.D., Jackson, O.

Vice Presidents—Miss Laura A. Shotwell, Brooklyn, N. Y.; Mrs. Caroline Leach, Louisville, Ky.; Mrs. B. T. Smelzer, Albany, N. Y.

Secretary—Miss Annie R. Wells, 83 Lexington Ave., Brooklyn, N. Y.

Treasurer—O. A. Allen, Buffalo, N. Y.

Trustee—Rev. S. Mills Day, Honeoye, N. Y.

CLASS FLOWER—DAISY.

CLASS OF 1888.—"THE PLYMOUTH ROCK."

"*Let us be seen by our deeds.*"

OFFICERS.

Honorary President—Dr. A. E. Dunning, Boston, Mass.
President—Rev. Harry LeRoy Brickett, Marion, Mass.
First Vice President—Mrs. George B. McCabe, Toledo, O.
Vice Presidents—Mr. S. C. Johnson, Racine, Wis.; Miss J. H. Wohlfarth, Niantic, Conn.; Mrs. M. C. F. Warner, New York, N. Y.; Mrs. J. Watson Selvage, Brooklyn, N. Y.
Secretary—Miss Mary E. Smith, 777 Putnam Ave., Brooklyn, N. Y.
Treasurer and Trustee—Mr. Russell L. Hall, New Canaan, Conn.
Class Chronicler—Mrs A. C. Teller, Brooklyn, N. Y.

CLASS COLOR—GRAY.
CLASS FLOWER—GERANIUM.

CLASS OF '88 DECENNIAL.

THE Class of '88 celebrated its decennial at Chautauqua August 16, at 10 a. m., in the Hall of Philosophy, which had been especially decorated for the occasion. Rev. H. L. Brickett, of Marion, Mass., class president, made the opening address, which was followed by the reading of the following letter by Mrs. George B. McCabe, first vice-president, from Dr. A. E. Dunning:

"BOSTON, Mass., Aug. 13.

"Dear Classmates of 1888—C. L. S. C.—I had hoped to be with you on our tenth anniversary. I thought I had planned to be at Chautauqua, but the illness and absence of others whose work I must do leave me no choice. Our motto is *Spectemur Agendo*, and I shall best be seen by my deeds at this time at my desk. President McKinley has thoughtfully issued his proclamation of peace in honor of the tenth anniversary of our class. We could not have asked more from him. Banners will wave, soldiers will come marching home, prayers of thanksgiving will arise, and our anniversary will be right in it. Well, we are thankful that the C. L. S. C. has done its part in uniting our whole land in common interests and common patriotism. The members of our Class of '88 at the New England Assembly voted to send greetings to you, and asked me to be the bearer of them. I wish I might have spoken them in your hearing. We rehearsed our history of fourteen years, had a banquet, and tried to look as young as we were when we started out on our course together. There were 338 of us who marched through the arches at Chautauqua ten years ago. Our ranks are thinner this year but our hearts are as warm. So may yours be when you march in line, as noble a band as ever bore the name of C. L. S. C. May God bless you, every one. At 10 o'clock next Tuesday I shall be thinking of you at the Hall in the Grove. I send my contribution toward The Hall of the Christ, and I hope when the building is finished we may all meet in it. With kind remembrances for you all, "Fraternally yours,

"A. E. DUNNING."

Chancellor Vincent then gave a brief address in his always appropriate and happy vein, and this was followed by the class history by Miss Robertine W. Brown. Dr. J. L. Hurlbut, Miss Kate F. Kimball, and Dr. Frank Russell made short congratulatory speeches, and then the class presented its decennial gift of $200 in cash for a memorial window in The Hall of the Christ, Mrs. A. C. Teller, of Brooklyn, making the presentation address. The gift was accepted by Chancellor Vincent, who expressed his gratitude at this unexpected donation to his cherished ideal. Vice-Chancellor George E. Vincent made the closing speech, and then the class song, written by Rev. D. L. Martin, of Le Roy, N. Y., was heartily sung, and after the benediction by Chancellor Vincent the happy 88's dispersed.

CLASS OF 1887.—"THE PANSIES."

"*Neglect not the gift that is in thee.*"

OFFICERS.

President—Dr. Frank Russell, Bridgeport, Conn.
First Vice President—James H. Taft, Brooklyn, N. Y.
Second Vice President—Rev. R. G. Alden, D.D., Washington, D. C.
Third Vice President—Miss L. Adell Clapp, Rochester, N. Y.
Eastern Secretary—W. G. Lightfoot, Canandaigua, N. Y.
Western Secretary—Rev. Rollin Marquis, Sedalia, Mo.
Northern Secretary—W. B. Wickins, Brantford, Ont., Can.
Southern Secretary—Rev. H. R. Blaisdell, Covington, Ky.
Treasurer and Trustee—Dr. Frank Russell, Bridgeport, Conn.

CLASS FLOWER—PANSY.

CLASS OF 1886.—"THE PROGRESSIVES."

"*We study for light to bless with light.*"

OFFICERS.

President—Mrs. Luella Knight, St. Louis, Mo.
Vice Presidents—Miss Sara M. Soule, Oneonta, N. Y.; Rev. R. S. Pardington, Brooklyn, N. Y.; Miss Belle Cummings, Wellsville, N. Y.; Mrs. William Schnur, Warren, Pa.; Mrs. A. H. Roberts, Baltimore, Md.
Secretary—Mrs. R. B. Burrows, Andover, N. Y.
Treasurer—Mrs. Mary S. Travis, Washington, D. C.
Historian—Miss Sara M. Soule, Oneonta, N. Y.
Poet—Mrs. Emily Huntington Miller, Evanston, Ill.
Trustee of Class Building—Mrs. L. Knight, St. Louis, Mo.

CLASS FLOWER—ASTER.
CLASS COLORS—CREAM AND SHRIMP PINK.

CLASS OF 1885.—"THE INVINCIBLES."

"*Press on, reaching after those things which are before.*"

OFFICERS.

President—Mrs. A. H. Chance, Vineland, N. J.
First Vice President—E. C. Dean, Delhi, N. Y.
Second Vice President—Mrs. C. A. Hinckley, Delhi, N. Y.
Secretary—Mrs. E. C. Elwell, Newark Valley, N. Y.
Treasurer—Mrs. M. L. Ensign, Chautauqua, N. Y.

CLASS FLOWER—HELIOTROPE.

CLASS OF 1884.—"THE IRREPRESSIBLES."

"*Press forward; he conquers who will.*"

OFFICERS.

President—Dr. W. D. Bridge, Boston, Mass.
Vice Presidents—Mrs. E. J. L. Baker, Chautauqua, N. Y.; Mrs. S. E. Parker, Chautauqua, N. Y.; Mrs. J C. Park, Cincin

nati, O.; Dexter Horton, Seattle, Wash.; G. W. Miner, Fredonia, N. Y.; John Fairbanks, Seattle, Wash.

Corresponding Secretary—Miss Nellie Stone, Oswego, N. Y.

Recording Secretary—Mrs. Adelaide L. Westcott, Holley, N. Y.

Treasurer—Miss M. E. Young, St. Louis, Mo.

Executive Committee—Mrs. W. W. Ross, Erie, Pa.; Miss E. A. Fowler, Pittsburg, Pa.; Mrs. S. E. Parker, Chautauqua, N. Y.; Mrs. C. P. Matthews, Chautauqua, N. Y.; Miss Clara L. Smith, Erie, Pa.

CLASS FLOWER—GOLDENROD.

CLASS OF 1883.—"THE VINCENTS."

"*Step by step we gain the heights.*"

OFFICERS.

President—Miss Anna Gardner, Boston, Mass.

First Vice President—Rev. J. R. Pepper, Memphis, Tenn.

Second Vice President—Miss M. J. Perrine, Rochester, N. Y.

Secretary—Mrs. William Thomas, Meadville, Pa.

Treasurer—Mrs. H. E. Eddy, Chautauqua, N. Y

CLASS FLOWER—SWEET PEA.

CLASS OF 1882.—"THE PIONEERS."

"*From height to height.*"

OFFICERS.

President—Mrs. B. T. Vincent, Denver, Col.

Vice Presidents—A. M. Martin, Pittsburg, Pa.; Dr. J. L. Hurlbut, New York, N.Y.; Mrs. F. O. Bailey, Jamestown, N.Y.; Miss A. E. Cole, Wellsville, N. Y.

Secretary—Mrs. N. B. E. Irwin.

Treasurer—Mrs. A. D. Wilder, Chautauqua, N. Y.

Trustees—Miss Annie Cummings, Rev. J. M. Bray.

CLASS SYMBOL—A HATCHET.

THE ORDER OF THE WHITE SEAL.

OFFICERS.

President—Rev. Thomas Cardus, Batavia, N. Y.

Vice President—Mrs. Hopper, Claremont, Can.

Secretary—Miss Butcher, Aurora, Can.

LEAGUE OF THE ROUND TABLE.

OFFICERS.

President—W. H. Westcott, Holley, N. Y.

Vice Presidents—Mrs. A. H. Chance, Vineland, N. J.; Miss R.W. Brown, Brooklyn, N. Y.; Mrs. Hard, East Liverpool, O.

Secretary and Treasurer—Mrs. Peters, Washington, D. C.

Executive Committee—Miss Mary C. Hyde, Friendship, N. Y.; Miss Mary W. Kimball. New York, N. Y.; Miss Caddie Whaley, Pomeroy, O.

GUILD OF THE SEVEN SEALS.

OFFICERS.

President—A. M. Martin. Pittsburg, Pa.

First Vice President—Mrs. George B. McCabe, Toledo. O.

Second Vice President—Mrs. L. R. Clarke, Andover, N. Y.

Secretary and Treasurer—Miss A. H. Gardner, 106 Chandler St., Boston, Mass.

Historian—Mrs. W. H. Westcott, Holley, N. Y.

Executive Committee—Mrs. D. F. Emery, Greenville, Pa.; Mrs. L. Knight, 5922 Horton Place, St. Louis, Mo.; Mrs. G. D. Marsh, Sherman, N. Y.

THE questions for the annual examination under the auspices of "The New Education in the Church" for 1898 are now ready. Persons desiring to take the examination will communicate with Chancellor J. H. Vincent, Buffalo, N. Y. (writing on the outside of the envelope, "Personal"). An arrangement will then be made for the forwarding of the papers early in November to a competent witness, so that the examination may be conducted in due form.

The First Prize is the "C. N. E. C. Gold Badge" for 1898.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"*We Study the Word and the Works of God.*" "*Let us Keep our Heavenly Father in the Midst.*"
"*Never be Discouraged.*"

C. L. S. C. MEMORIAL DAYS.

OPENING DAY—October 1.
BRYANT DAY—November 3.
SPECIAL SUNDAY—November, second Sunday.
MILTON DAY—December 9.
COLLEGE DAY—January, last Thursday.
LANIER DAY—February 3.
SPECIAL SUNDAY—February, second Sunday.
LONGFELLOW DAY—February 27.
SHAKESPEARE DAY—April 23.
ADDISON DAY—May 1.
SPECIAL SUNDAY—May, second Sunday.
SPECIAL SUNDAY—July, second Sunday.
INAUGURATION DAY—August, first Saturday after first Tuesday.
ST. PAUL'S DAY—August, second Saturday after first Tuesday.
RECOGNITION DAY—August, third Wednesday after first Tuesday.

SPECIAL MEMORIAL DAYS FOR 1898–99.

ALFRED DAY—October 18.
CAVOUR DAY—November 15.
CROMWELL DAY—December 16.
GLADSTONE DAY—January 14.
DRYDEN DAY—February 18.
WORDSWORTH DAY—March 17.
SHELLEY DAY—April 20.
TENNYSON DAY—May 18.

ABSTRACT OF BISHOP VINCENT'S RECOGNITION DAY ADDRESS.*

As in religion so in education, we may overestimate the "institution," forgetting that all true religion must begin with the individual and that all true education is self-education. The school is not everything. After the college career the best part of one's education is to be acquired. Without personal conviction, resolve, and enthusiasm, school life at its best will accomplish little.

*Delivered in the Amphitheater at Chautauqua, August 18, 1898.

What is education? It consists in the formation of certain habits. When a man is truly educated he has acquired the habit of observing facts and people; of thinking about them; of reading what other people think about them; of growing his own thoughts on a variety of subjects; of regulating his own thoughts, avoiding idle reverie, and acquiring the art of concentration; of expressing his thoughts by voice and pen; of embodying his knowledge in action, and this in the service of the individual and society. This man is the truly educated man. Of course, school contributes to education. Its advantages we have no time now to consider, but Chautauqua stands for the idea that these habits may be formed and cultivated out of school.

Chautauqua stands (1) for the inspiration of young people to desire and to seek education. It aims to hold them in the school, especially during the perilous years between twelve and sixteen. Chautauqua stands (2) for the doctrine that education is not limited to youth, and that adults may become educated. (3) Chautauqua emphasizes the value of fragments of opportunity. It shows what may be done by one page a day of good reading in the course of ten years. (4) Chautauqua gives in good English the vast outlook of the scholar—the college outlook; keeping parents and children together while the latter enjoy the advantages of the school. (5) Chautauqua appeals to sentiment. It develops the class and college spirit by sundry devices, such as we this day enjoy in our class organizations, our processions, banners, songs, and the incidental provisions made for the promotion of a feeling of fraternity and enthusiasm. (6) Chautauqua insists that just as the personality of teachers and professors in the institutions of learning have greater influence over students than textbooks, lectures, or recitations, so in self-education nothing is better than extensive biographical reading, that people out of school may become conversant with great characters of literature and history. Finally, the highest aim of Chautauqua is the development of character.

SIDNEY LANIER.

THE Chautauqua season of 1898 has left behind it a bright record. Despite the frequent rains which would occasionally interfere with the best-laid plans, the summer which marked the twentieth anniversary of the C. L. S. C. and the graduation of the Lanier Class was full to overflowing with enthusiasm and good cheer from first to last. Since Rallying Day was ushered in with a heavy shower, the anniversary exercises which were to have been held in the Hall of Philosophy were transferred to the Amphitheater, where nearly one hundred delegates and a large and interested audience gathered to do honor to the occasion. The sun shone brightly on the following day and the out-of-door reception in St. Paul's Grove made an attractive picture. Certain splendid old trees had been selected as the headquarters for various sections, and New England, the South, the far West, and other geographical divisions entertained their guests most hospitably, while "Canada and other neighbors" gave an all-around-the-world feeling to the occasion which was wholly in keeping with the Chautauqua idea. From Rallying Day until the close of the Assembly, C. L. S. C. enthusiasm ran high. The daily councils brought out many helpful suggestions from circle leaders or individual students, while Round Tables and class meetings, Vigil and Vesper Service, brought social good cheer and helpful and inspiring thoughts to countless Chautauquans, whose brief sojourn at Chautauqua meant the gathering of courage and strength for a whole twelvemonth of active endeavor.

The Class of '98 grew daily in numbers till Recognition Day, when 186 of its number passed through the arches and were welcomed into the Society of the Hall in the Grove, and listened to the Recognition Day oration by Chancellor Vincent. Dame Nature was not in her most propitious mood, but no amount of rain could dishearten the Laniers, and when in the afternoon the bright sunshine shone through the white pillars of the old Hall, they assembled with reverent devotion to do honor to the memory of the great poet whose heroic life and lofty message to his fellow men had been their inspiration through four years of struggle toward

the goal. A bust of Lanier, a replica of one given to Johns Hopkins University, was presented to Chautauqua by Prof. Herbert B. Adams and accepted by Chancellor Vincent in behalf of the class. Letters were read from Mrs. Sidney Lanier and from Clifford Lanier, and a selection from the poems of Father John B. Tabb, the prison comrade and intimate friend of the poet. Selections from Lanier's poems, "A Ballad of Trees and the Master" and "The Song of the Chattahoochee," were read, and then the members of the graduating class received their diplomas at the hands of Chancellor Vincent and Dr. J. L. Hurlbut, general superintendent. The absence of President Lewis Miller was deeply regretted by the class, at whose request a telegram of greeting and sympathy was sent.

In the evening the Athenian Watch-fires flamed picturesquely amid the leafy surroundings of the Hall, where the Society of the Hall in the Grove formally welcomed '98 into its membership. The ceremony of eating salt, which has become an established feature of this occasion, was duly observed and a social half hour followed, when the class experienced for the first time the full meaning of membership in this venerable society, which is one of the foundation stones of Chautauqua.

CHILI.—Seven missionary teachers, three cable clerks, and a business man, away off in Iquique, enjoy an intellectual feast twice every month at their regular circle meetings. The program for one meeting included a roll-call, to be answered by the name of a river in Germany, questions on two of the books, a reading, "Expansion of Christianity," an essay on "The Ancient City of Rome," and a general war talk.

MAINE.—An entertaining report from Belfast contains the following: "Seaside Chautauquans had a very pleasant meeting with Mrs. J. M. McKeen, Monday afternoon, April 18. The exercises consisted of quotations about Washington, D. C., items of current events, a lesson on Roman art, and the question table. The president of the circle, Mrs. M. E. Hubbard, who had just returned from an excursion to New York and Washington, gave an interesting description of the places visited—public buildings, art galleries, and many other objects which she saw. The vice-president then, in behalf of the members of this circle, presented Mrs. Hubbard with a beautiful gold pin, the badge of a C. L. S. C. graduate, a token of our appreciation of her faithful labors as president of Seaside Circle for the past five years. A volume of Tennyson's poems was given to one of our most earnest and interested members, who will shortly remove to Massachusetts. We hope she may find Chautauqua friends wherever her home may be. The hostess served refreshments and all enjoyed the hour spent in conversation. Monday, April 25, the members of the circle were entertained by the president, Mrs. M. E. Hubbard, at her home. The quotations, lesson, and program were considered as usual and at five o'clock all were summoned to the dining-room, with its profusion of beautiful plants and its well-spread table, and invited to partake of the material feast. At each plate a souvenir card and bouquet were placed. These are some of the ways that social pleasure is combined with our regular work."

MASSACHUSETTS.—Seven years of uninterrupted study have made the Keep Pace Circle, with its branch circles, a powerful influence in and around Boston.

NEW YORK.—The grand old state of New York, always loyal to Chautauqua, has her full quota of interesting circles, not the least important being the Brooklyn Chautauqua Alumni, a thoroughly live and energetic organization. Concerning its work the secretary writes: "The Brooklyn Chautauqua Alumni was organized in the fall of '89, an invitation having been sent to each C. L. S. C. graduate in the city to attend a social meeting for that purpose. It was then decided to meet the first Tuesday of each month, excepting July, August, and September, and no meeting has yet been omitted. The circle now numbers about seventy-five. The meetings are held at private houses. The programs are printed a month in advance that they may be distributed at the meeting, those absent receiving theirs by mail. At the close of the program a social half hour is spent, ice cream and cake being served at the expense of the circle. The necessary camp chairs are also paid for out of the treasury. The annual dues of one dollar cover these expenses. Various seal courses have been read by our members and some have earned as many as thirty seals. To meet the various tastes of our membership one method has been to select from four to six courses for the work of the year, and request each one to choose one or more courses, as time permitted. Each group elects a leader and meets once between the regular monthly meetings and devotes the evening to the study of the subject which has been chosen. We thus keep alive the work of the C. L. S. C. and our members are closely in touch with all the Chautauqua movements in our city. Many are actively interested in undergraduate circles as well as in the Brooklyn Chautauqua Union, which aims to unite in close bonds all C. L. S. C. interests and spread more widely the Home College in our city."

——The Canandaigua Circle spent "An Evening with Sidney Lanier" at their twelfth annual meeting, held with Mr. and Mrs. N. E. Hutchens, June 28.

THE SUMMER ASSEMBLIES FOR 1898.

CHAUTAUQUA, NEW YORK. Again the increasing popularity of Chautauqua as an ideal place for spending a few months of the summer has been attested by the immense crowds which flocked there to take advantage of its entertaining and recreative features. At an earlier date than usual the capacities of the boarding-houses, hotels, and the assembly rooms were tested, but the early comers as well as the late arrivals found everything in readiness for their reception.

The work of the landscape-gardener was noticed in the attractive floral gardens, pleasant parks, and grassy lawns, and all along the circuitous roadways could be seen new buildings, old ones made new by fresh coats of paint, the new incandescent bulbs which transform dark groves into bowers of beauty, the carefully swept streets, and other signs of the progressive spirit which pervades the municipal branch of Chautauqua. In fact on every hand are evidences that the management has done all possible to promote the material comfort of the summer visitors.

Though he is far away from home and home friends the summer resident of Chautauqua finds he has entered a place where pleasant and lasting friendships may be formed with cultured people from the North, East, South, and West. One of the most enjoyable features of a Chautauqua summer is the social life, and this year the attractions were more numerous than ever.

But if one phase of Chautauqua more than another appeals to the busy multitudes it is the intellectual. A vast array of good things was offered to Chautauquans this year. Some of the world's most renowned orators and thinkers delighted the immense audiences with lectures on subjects of popular interest. In the department of literature there were delightful lectures by Mr. Leon H. Vincent, the well-known literary critic and lecturer, Prof. L. Dupont Syle, of the University of California, and Dr. Richard G. Moulton. Art and its various branches had authoritative exponents in Mr. A. T. Van Laer and Mrs. L. Vance-Phillips. A pleasing series of educational lectures was delivered by Mr. James L. Hughes. Subjects theological, historical, biographical, economical, sociological, and scientific were discussed by eminent specialists, among whom were Prof. Gaston Bonet-Maury, of the University of Paris, and Prof. Caspar René Gregory, of the University of Leipsic. The Earl and Countess of Aberdeen were also among the foreign visitors who spoke from Chautauqua's platform. Leland Powers, George Riddle, and Will Carleton helped to vary the program by their entertaining readings.

One of the great features of the daily program was the music. The chorus under the direction of Dr. H. R. Palmer was unusually strong, and after a study of a selection from Gounod's "Redemption" and portions of Rubenstein's "Tower of Babel" these marvelous selections were successfully rendered in a grand concert. The lectures and recitals by Mr. I. V. Flagler, and the work of Mr. Harry Vincent and of Rogers' Band and Orchestra were a gratification to their auditors. Mr. Sol Marcosson, Mr. William H. Sherwood, Dr. Ion A. Jackson, and Mr. Ernest Gamble also contributed much to the musical success of Chautauqua.

The strictly educational feature of Chautauqua is represented by the Collegiate Department, which consists of ten schools, conducted by more than fifty instructors from the best schools in the country. Unusual interest and activity were displayed in this department. More students than ever were enrolled in the various classes, and the class-rooms and assembly halls were crowded to their utmost capacity. Under the principalship of Dr. Harper there has been a constant growth in the popularity and efficiency of this branch of the Chautauqua System of Education.

Representatives of the C. L. S. C. department of the Assembly began to arrive early in the season, and by Rallying Day, August 4, many enthusiastic delegates were ready to participate in the exercises of the day, which consisted of an informal conference with the secretary, Miss Kate F. Kimball, addresses in the Amphitheater, and an informal reception to the delegates in the C. L. S. C. Building. During the entire season there were councils and Round Table meetings, where the interests of the work were discussed, and in the general program were many lectures and entertainments pertaining to the subjects to be studied by the C. L. S. C. readers during the coming year. A large number of people enrolled in the Class of 1902, and in the initiatory exercises, by which they were welcomed to the C. L. S. C. ranks, they were introduced to some of the famous characters whom they will study this winter.

On Recognition Day the exercises were most inspiring. Though the weather was unfavorable the program was never more successfully carried out. The address to the class was delivered by Bishop Vincent in his happiest, most vigorous style. In the afternoon the presentation of a bust of Sidney Lanier, sent to the class by Prof. Herbert B. Adams, of Johns Hopkins University, took place in the Hall of Philosophy, at which time several letters of

greeting from absent Chautauquans were read. The exercises of the afternoon closed with the presentation of diplomas.

ASHLAND, OREGON. One of the most successful sessions of the Southern Oregon Assembly was held this year at Ashland, Ore. The attendance was very good, much better than last year.

The general program offered many attractions. Among the principal lecturers were John Temple Graves, Dr. P. S. Henson, Rev. Thomas McCleary, and Hoyt L. Conary. In the educational department classes were formed in music, cooking, Bible normal work, elocution and physical culture, and W. C. T. U. methods, each conducted by able workers. The work of the C. L. S. C. department was done in Round Tables, which are reported the best ever held.

BEARDSTOWN, ILLINOIS. The River View Park Assembly held a most successful meeting on grounds located on the west bank of the Illinois River, near Beardstown. In a grove of magnificent elms the management erected a pavilion, made tennis courts and croquet grounds, secured row-boats, and made all necessary arrangements for the pleasure of the Assembly guests.

A program of pleasing variety was offered to the public. The musical attractions included a soloist, a male quartet, and a brass band. Lectures were delivered by Dr. John P. D. John, Dr. E. P. Swift, Hon. S. P. Leland, Col. L. F. Copeland, Dr. Robert McIntyre, and others equally prominent.

BETHESDA, OHIO. The Epworth Park Assembly suffered in attendance from the heavy and incessant rains. But those present were treated with many excellent things in the way of entertainment and lectures. On the program for Recognition Day were a lecture by Dr. A. A. Wright, a concert by the Schubert Glee Club, and a lecture on the wonders of electricity by Prof. H. V. Richards. One C. L. S. C. graduate was present to receive a diploma. At the Round Table meetings interesting conversations were held. On the Assembly platform were representatives of America's best oratory. The lectures of Dr. John B. DeMotte were revelations of great value and Dr. Wright's Scripture teaching and expositions were highly instructive, and Edison's moving pictures were very entertaining.

In the educational department instruction was given in physical culture, elocution and oratory, vocal music, and Bible exposition.

BOULDER, COLORADO. The management of the Texas-Colorado Assembly chose a charming site on which to locate the Assembly grounds. It is a table-land of forty acres on the eastern side of the Rocky Mountains, at an altitude sufficiently great to insure a healthful atmosphere.

One of the leading features of this Assembly was the Collegiate Department, which consisted of seven schools of several courses each. In addition to these there was an opportunity for special work in several other departments of education.

On the Assembly program appeared the names of many of the most prominent lecturers of America. The list included Dr. P. S. Henson, Gen. John B. Gordon, Dr. T. DeWitt Talmage, Pres. E. B. Andrews, Dr. John B. DeMotte, Jahu DeWitt Miller, and Eli Perkins. Concerts, readings, legerdemain performances, pronunciation matches, woman's council, and daily C. L. S. C. Round Tables are some of the other attractions offered to the Assembly's patrons.

CRYSTAL SPRINGS, MISSISSIPPI. The attendance at Crystal Springs Assembly was very good and it compared favorably with that of former years.

The management, represented by President Lotterhos and Prof. W. D. Jones, superintendent of instruction, made every preparation for a successful meeting. In the educational department a teachers' normal course was provided. The work of the C. L. S. C. Round Table was of a general educational character, in which the members of the circle present participated.

One of the specially attractive features of the Assembly was the music furnished by the Kentucky Colonels' Quartette and the Mendelssohn Quartette. Interesting and instructive lectures were delivered by Bishop C. B. Galloway, Dr. E. Benjamin Andrews, Prof. J. L. Shearer, and Dr. J. B. Hawthorne.

This session of the Assembly was one of the most successful ever held, and already plans are being made for the season of 1899.

DEMOREST, GEORGIA. The North-East Georgia Assembly held its sixth annual meeting, August 18–29, at Demorest.

One of the most delightful features was the musical department, in which soloists, both vocal and instrumental, orchestra, and chorus furnished delightful entertainments.

Some of America's representative lecturers attracted large audiences. Among them were Mr. Edward Page Gaston, Dr. W. F. Cook, Rev. Joseph S. Stewart, Rev. W. O. Phillips, and Rev. W. D. Hart.

Miss Bunnie Love had charge of the C. L. S. C. Round Table. There were several other departments of instruction provided by the Assembly.

DES MOINES, IOWA. The grounds of the Midland Chautauqua Assembly are located at Chautauqua Park, Des Moines, Ia. The unusually attractive program prepared for the Assembly drew large audiences, and financially, as well as educationally, the season was a most successful one.

Great interest was manifested in the educational

lectures by Dr. Emerson E. White, Mr. Leon H. Vincent, Dr. Graham Taylor, and Hon. Henry Sabin. Among the other entertaining speakers were Dr. Robert Nurse, Dr. Russell H. Conwell, Dr. Thomas Dixon, Jr., Charles F. Underhill, Hon. George R. Wendling, and Dr. Edgerton R. Young.

The great day, judging from the attendance, was Music Festival Day, when Dr. M. L. Vincent, with a chorus of two hundred voices, entertained the crowd. The music of the Harmony Male Quartette, the Arion Ladies' Quartette, and the Midland Mandolin Orchestra gave a pleasing variety to the Assembly program.

Superior advantages were offered to students by the Midland Chautauqua System of Summer Schools, under the principalship of Hon. Henry Sabin. There were nine departments of instruction, each conducted by educators of recognized ability.

In the C. L. S. C. Round Table meetings there were talks on London, a review of "Imperial Germany," and discussions of methods of Chautauqua work and of new and helpful books.

On Recognition Day the usual exercises were held. Elaborate decorations transformed the auditorium into a bower of beauty, and the eight C. L. S. C. graduates, after passing under the arches and through the golden gate, assembled there with their friends to listen to Hon. George R. Wendling. Mrs. A. E. Shipley, the state secretary of the C. L. S. C., presented the diplomas. A C. L. S. C. class for 1902 was organized. Among the social delights of the season were two receptions by the Des Moines Chautauquans.

DEVIL'S LAKE, NORTH DAKOTA. At Devil's Lake Assembly this year the attendance was the largest in the history of the organization.

A chorus of sixty trained voices, under the leadership of Prof. D. C. McAlister, was a main feature of the program. The lectures by Dr. W. T. S. Culp, of Madison, Ohio, Dr. George Hindley, Dr. M. P. Wilkin, Dr. W. E. Gifford, and the Round Table talks by Dr. Culp on the "Larger Intellectual Life," and Dr. Gifford's lessons in elocution were instructive and entertaining.

Woman's Day, with such speakers as Mrs. Leonora Lake, of St. Louis, Mrs. Bessie Scoville, of Minneapolis, Miss Elizabeth Preston, Mrs. Nellie S. Kedzie, of Peoria, and Miss Marie B. Senn, of Fargo, was a most interesting occasion. Temperance, domestic economy, social purity, and other subjects relating to reform were ably discussed.

The hotel accommodations, the boating and bathing facilities, the outdoor recreations, in addition to the lectures, concerts, and cinematograph pictures by Professor Kline every evening, made this year's Assembly a great success.

EAU CLAIRE, WISCONSIN. The Washington Park Assembly opened its first session at Eau Claire, Wis., under the superintendency of Rev. John S. Parker. All the meetings were interesting and the lectures most entertaining and instructive. Mr. Douglas, of Eau Claire, who has spent much time abroad, explained the map of England from the standpoint of an engineer and a tourist. A unique feature of the Assembly program was the children's hour, during which Rev. John S. Parker instructed the little ones in Norwegian folk-lore. He also delivered an address on "The American Flag," which received special commendation.

Much attention was given to C. L. S. C. work.

FINDLEY'S LAKE, NEW YORK. There were four departments of instruction provided at Lakeside Assembly, which holds its sessions at Findley's Lake, N. Y. Instrumental music was the subject taught by Miss Carrie Wiest, Miss Winifred Wilson gave instruction in vocal music, Miss Carr had charge of elocution, and Dr. Landis of the Bible study.

On Recognition Day addresses on the benefits of the C. L. S. C. work were delivered by Miss Britton and Hon. Z. S. Zank.

The attendance at the Assembly exceeded that of any previous year.

GAINESVILLE, GEORGIA. The Gainesville Chautauqua was in session ten days in July. The meetings were held in the auditorium of the Georgia Female Seminary, a building well adapted to that purpose.

The program offered to the public was one of unusual excellence and it is to be regretted that the rainy weather prevented the large attendance expected. Music had a large place on the program. Card's Orchestra, a brass band, I. M. Mayer, the pianist, Miss Frances Hughes, the great harpist, and Mr. Rawson Wade, organist, were some of the musical attractions. Miss Berta McAfee gave elocutionary entertainments, and Soto Sunitaro, a Japanese musician and illusionist, delighted the audiences with his performances. Among the lecturers who occupied the platform were Col. L. F. Copeland, Bishop H. M. Turner, Dr. P. D. Pollock, E. A. Havers, and Dr. Warren A. Candler.

Two departments of instruction were provided, the Bible class, conducted by Dr. C. P. Williamson, and the kindergarten work, under the direction of Miss Madge Bigham and Miss Berta McAfee. The interest in universal education resulted in the organization of a C. L. S. C. Class of 1902.

HAVANA, ILLINOIS. The attendance at the Havana Assembly is reported as having been very good and the attractions offered to the public especially fine.

On Recognition Day Dr. Robert McIntyre was the principal speaker. Other leading platform speakers

were Dr. A. A. Willits, Hon. George R. Wendling, Pres. George Hindley, Rev. McGee Waters, Dr. J. W. E. Bowen, and Prof. William M. R. French, who illustrated his lectures by sketches drawn in the presence of the audience. Concerts, impersonations, and other entertainments helped to make a rare and varied program.

HEDDING, NEW HAMPSHIRE. In addition to the natural attractions of location, the Hedding Assembly offered a program of unusual excellence to tempt the public.

The daily program was made up of lectures, concerts, entertainments, and class work. Prof. Frank R. Roberson, Rev. Roland D. Grant, Mrs. Anna Christy Fall, and Mr. A. M. Stickney are among those who occupied the lecture platform.

Educational work was done in art, French, physical culture, elocution, Greek, and music. The boys' and girls' department was an admirable feature of this branch of the Assembly.

LAKE MADISON, SOUTH DAKOTA. At the Lake Madison Assembly there was a larger average attendance than last year. Under the direction of an able management, whose representatives are Pres. J. H. Williamson and Supt. C. E. Hager, a program varied and interesting was successfully carried out. The list of platform orators included the names of Dr. E. L. Eaton, Pres. W. G. Graham, Mrs. Leonora M. Lake, Dr. John B. DeMotte, Dr. Eugene May, whose lectures on Cuba proved very popular, and Russell H. Conwell, who discussed the Institutional Church. Several popular entertainers were present, and the music furnished was fine.

Great enthusiasm was manifested in the Round Table meetings, where there were discussions on subjects pertaining to sociology. The books of the C. L. S. C. for 1897-98 were carefully reviewed and much interest displayed, especially in "The Social Spirit in America" and "Imperial Germany." This resulted in the organization of a Class of 1902. On Recognition Day there were the usual exercises, with addresses by Dr. John B. DeMotte and Dr. E. L. Parks.

Several classes were organized in the educational department and each was taught by an able instructor.

LANCASTER, OHIO. One of the special features of the Lancaster Assembly was the C. L. S. C. work. Interesting Round Table meetings were held, where the merits of the C. L. S. C. were presented and literature regarding the course of reading distributed. On Recognition Day two graduates passed through the arches. The official program was followed and the march about the grounds was led by the Boys' Industrial School Band. Jahu DeWitt Miller delivered the address. In the evening a C. L. S. C. reception and banquet were given at Hotel Woodside.

Educational work was done in oratory, physical culture, Bible and normal study, kindergarten, and the languages, each department being in charge of an able instructor.

Some of the lecturers who appeared on the Assembly platform are Dr. M. M. Parkhurst, Chaplain Lozier, Hon. E. S. Wilson, Hon. Mills Gardner, Sam P. Jones, and Rev. Elijah P. Brown.

LONG BEACH, CALIFORNIA. The promoters of the Long Beach Assembly, represented by Pres. Arthur L. Hamilton and the secretary, Prof. George R. Crow, made all possible arrangements for the success of this year's session. A large number of departments of instruction were open to students and the instructors were talented workers in their special fields. Classes were formed in the arts, the sciences, history, literature, and mathematics.

At the Round Table meetings, held in the interest of the C. L. S. C., Prof. George R. Crow presented the plans of the work and there was much interest manifested. The result was the organization of a Class of 1902. Recognition Day was an occasion of much interest. Appropriate papers were read by Miss F. E. Freeman, Rev. S. C. Kendall, and Miss M. A. Stansbury.

On the general program of the Assembly were eminent lecturers, among whom were Thomas McCleary, Rev. P. H. Henson, Mrs. Dutton, and John Temple Graves. Excellent music was rendered by soloists and concert companies, and readings were given by noted professionalists.

MARINETTE, WISCONSIN. The successful carrying through of the second season of the Northern Chautauqua Assembly is a matter for the congratulation of all the citizens of Marinette, and proves that the backwoods town has become a part of civilization and intelligence. It was a stupendous enterprise, and its undertaking proves the energy and ability of its promoters.

This was the second year of the Assembly here. When Dr. H. C. Jennings of Chicago came to the city a year ago last winter and proposed that a Chautauqua Assembly be organized here, the business men and citizens immediately took the matter up. A beautiful tract of heavily wooded land, situated on the borders of Green Bay, just two miles from the city, was bought. There the first Assembly was held. When the season closed it was decided to make the Assembly an annual affair, a corporation was formed, twenty-five thousand dollars subscribed, and work was begun. The grounds were paid for and platted. Five beautiful and artistic buildings were erected in which to hold the meetings and classes: the auditorium, with a seating capacity of 3,000, a Normal Hall, Hall of Philosophy, Administration Building, and dining-hall.

Pretty drives and paths were laid out. The

grounds were lighted with electricity and the water system extended to them. The Assembly opened August 1, and from the 1st to the 15th of August the attendance averaged 5,500 daily. The program was excellent, including such men as Sam Jones, Father Nugent, Dr. Robert McIntyre, Jahu DeWitt Miller, and Bishop Vincent. The entertainers were also good. Class work was under the direction of splendid leaders and proved of great interest.

The Assembly of Marinette has received unstinted praise from leading speakers, who have expressed their pleasure in speaking before such splendid audiences as have been there to hear them.

Nature has done much to make this Assembly a success. The broad waters of Green Bay spread out before it, shallow and warm, offering to the young facilities for safe bathing. The climate in summer is cool and delightful, the fresh breezes from the bay making the warmest days pleasant.

Next year many improvements will be made, the avenues graveled, and a sewer system put in. Lots on the ground are being sold to those desiring, and numerous pretty cottages may dot the grounds where this year were only tents, and visitors from other cities will find in the Northern Chautauqua Assembly a profitable and pleasant place to spend several weeks of the summer.

MONONA LAKE, WISCONSIN. The nineteenth annual session of Monona Lake Assembly was very successful under the superintendency of Rev. James A. Worden, D.D. Chautauquans were present in great numbers, and took up their work with enthusiasm.

The usual Recognition Day exercises were held and seventeen passed through the gate and received their diplomas. Hon. Amos P. Wilder gave a most scholarly address, and nine were enrolled in the Class of 1902. The Round Table was presided over by Miss J. H. Rogers, of Portage, the newly chosen president.

Lectures were given by Rev. Robert McIntyre, Professor DeMotte, Mrs. Ballington Booth, Rev. J. H. Barrows, D.D., Rev. J. M. Buckley, D.D., Rev. T. DeWitt Talmage, Rev. Sam W. Small, D.D., Pres. E. Benjamin Andrews, and others.

Miss Isabel Garghill delighted all by her readings. Mrs. W. F. Crafts conducted the primary work, and Miss Maria C. Bretson was at the head of the W. C. T. U. work, doing it admirably.

Music was furnished by the Slayton Jubilee Singers, the Eastern Star Quartet, and a famous military band of thirty-five men.

Miss Cecilia Eppinghausen Bailey, Harry J. Fellows, and Signor Schilli Alberti were the soloists.

The attendance throughout was good, and receipts exceeded expenses by a considerable amount.

MONTEAGLE, TENNESSEE. At Monteagle Assembly a wealth of good things was provided for the summer visitors. Recreation, amusement, entertainment, and study were the order of each day.

The educational department offered unexceptional advantages to students. The summer session of the Boston School of Expression was held at the Assembly and the new courses opened this year increased its popularity. The School of Music under the directorship of a competent leader also did effective work. Art, history, education, science, the languages, physical culture, and business were also in the list of educational departments.

Among the special features of entertainment provided were readings, song and piano recitals, an oratorical contest, and orchestral concerts, and special programs were arranged for Farmer's Day, Woman's Day, Children's Day, and Mission Week.

At the Round Table meetings subjects pertaining to the C. L. S. C. books for the coming year were discussed. On Recognition Day Miss Battaille and Mr. A. P. Bourland delivered addresses. A new C. L. S. C. class was organized.

MOUNT GRETNA, PENNSYLVANIA. Season tickets to the Pennsylvania Chautauqua Assembly covered over one hundred concerts, lectures, and entertainments. Readings and impersonations, dramatic and musical recitals, illustrated lectures, post-prandial lectures, and an oratorical contest are some of the attractions to which the large crowds in attendance were treated. On the list of entertainers are Mr. Leon H. Vincent, Miss Mary Louise Clary, Dr. M. H. Richards, the Park Sisters, the Mozart Symphony Club, Hon. Henry Houck, Dr. Edgerton R. Young, Mrs. Sarah Tyson Rorer, Dr. Eugene May, Lignante's Neapolitan Band, Dr. S. C. Schmucker, and many others equally noted.

The summer school included about thirty departments, each conducted by a talented specialist.

The C. L. S. C. and its work very properly occupied a prominent place in the daily program. At the Round Table meetings literary and educational topics were considered and plans for conducting the work discussed. The C. L. S. C. course for the coming year was presented and talks given on subjects relating to the year's work. An effort was made to awaken an interest in the distribution of good literature and several pastors consented to preach on that topic September 18.

On Recognition Day the regular order of exercises for such occasions was closely followed. One member of the Class of 1898 and two graduate members of former classes passed through the golden gate. Mr. George H. Lincks, superintendent of the C. L. S. C. department, presided, and Hon Henry Houck delivered the address. The class poem was read by Prof. De Kellar Starney. It is expected that six new circles will be organized in the vicinity.

OCEAN GROVE, NEW JERSEY. A varied and instructive program was arranged for the Ocean Grove Assembly. The special features which pleased the audiences were illustrated lectures, concerts, and crayon sketches. Interspersed among these were able lectures by Rev. S. P. Cadman, D. D., Dr. Jesse L. Hurlbut, Prof. F. R. Roberson, and Dr. Goucher.

The C. L. S. C. interests were looked after in Round Table meetings, conducted by Dr. Jesse L. Hurlbut and Rev. F. C. Harding. On Recognition Day five graduates passed through the golden gate and under the arches. Addresses were made by Bishop J. H. Vincent and Bishop J. N. Fitzgerald. A C. L. S. C. Class of 1902 was formed.

In the educational department there was a Sunday-school normal class conducted by Prof. W. A. Hutchinson, biblical introduction was treated by Rev. B. B. Loomis, New Testament Greek was taught by Prof. O. G. J. Schadt, and the School of Expression was conducted by Mrs. Marian Leland.

OCEAN PARK, MAINE. The new name for the Assembly at Ocean Park is Chautauqua-by-the-Sea for Eastern New England.

The management, represented by Pres. L. M. Webb and Supt. E. W. Porter, planned and carried out their work to the satisfaction of the patrons of the Assembly.

Classes were organized in six departments of instruction, and at the head of each was an instructor of recognized skill and authority. One of the most attractive of these departments was the Summer School of Oratory and Physical Culture, under the direction of Miss Sadai Prescott Porter.

The music rendered this season was of an unusually high order. Miss Edna Brown, Miss M. Louise Morse, and Master Kendrie delighted the audience. The grand chorus, directed by Prof. J. E. Aborn, and the Assembly quartet, composed of cultured musicians, assisted in the concerts.

On Recognition Day Miss Vandelia Varnum addressed the class of seven who received diplomas. A C. L. S. C. banquet and grand concert were other pleasant features of the day's program. The Round Tables, conducted by prominent workers, aroused great interest in C. L. S. C. work, and new names were added to the class roll of 1902.

The list of lecturers contained the names of many of America's most eminent platform orators.

OTTAWA, KANSAS. Fifty-seven miles west of Kansas City, along the Marais du Cygne River, is the finest natural grove in the state of Kansas. In this grove, to which the name Forest Park has been given, the Ottawa Chautauqua Assembly held its summer session from June 13 to June 24. The continuous rains and the Omaha Exposition prevented the usually large attendance, but those present were much pleased with the program, which was second to none in the country.

Some of the most distinguished platform orators were present. Among them were Dr. J. B. De Motte, Hon. A. C. Scott, Dr. Graham Taylor, Hon. George Wendling, and Rev. Sam Jones.

For strictly educational work there were the normal and Bible class, the ministers' institute, women's council, the children's and young people's classes, besides classes in music, art, and kindergarten work. The Boys' Club, organized this year, proved a popular innovation, and eighty boys enjoyed the season's work.

In the C. L. S. C. department, Dr. Jesse L. Hurlbut and Mrs. L. B. Kellogg had charge of the work, which consisted largely of discussions of topics relating to the work of the past year and to that of the future. There was also a lecture on "Sidney Lanier." The attendance at these meetings was good and the interest aroused resulted in the organization of a Class of 1902.

On Recognition Day, Dr. J. L. Hurlbut was the chief speaker and several graduates received diplomas.

PONTIAC, ILLINOIS. The managers of the Pontiac Assembly secured the best talent possible to entertain the visitors this season.

Readings and impersonations, stereopticon views, entertainments by the physical culture class, concerts by the band, feats of magic, the amet-magniscope, and chalk-talks are some of the attractions for which arrangements were made.

The Assembly's list of lecturers included many well-known names. Among them were Philip F. Matzinger, Booker T. Washington, John G. Woolley, Dr. Austen K. de Blois, and Sam P. Jones.

Dr. George M. Brown looked after the C. L. S. C. interests in the Round Table meetings.

ROCK RIVER, ILLINOIS. On the Rock River Assembly program the usual amount of time was given to C. L. S. C. work. Recognition Day was August 5.

Among the lecturers and entertainers announced for this season were Rev. J. H. Wilson, Pres. W. H. Dana, Mrs. Leonora M. Lake, Gen. O. O. Howard, Col. George W. Bain, Bishop John H. Vincent, Slayton's Jubilee Singers, the Sappho Lady Quartet, and Miss Rachel Baumann.

SPIRIT LAKE, IOWA. At Spirit Lake Assembly Mrs. A. E. Shipley had charge of the Sunday-school normal work, and the C. L. S. C. Round Table, and Prof. H. W. Fairbank directed the Assembly chorus.

The Recognition Day exercises were unusually interesting. Ten graduates passed through the golden gate and the address to them was made by Mrs. Shipley. A Class of 1902 was organized.

Among the orators to speak from the platform were Dr. Russell H. Conwell, Hon. George Wendling, Bishop McCabe, Governor Peck, and Father Nugent.

TALLADEGA, ALABAMA. "Attendance good—one third larger than last year," is the report that comes from the Alabama Chautauqua Assembly.

Mrs. S. F. H. Tarrant conducted the meetings of the C. L. S. C. Round Table. Through her efforts a deep interest in the work was awakened and new members were added to the Class of 1902. On Recognition Day the regular order of exercises was followed and one diploma was awarded after addresses by Mrs. Tarrant and Clifford Lanier.

Excellent work was done by the students in the summer schools, who were instructed by talented educators. Mrs. P. H. Sims had charge of the physical culture and elocution classes, painting was taught by Miss Mary Oliver, kindergarten by Mrs. Finnegan, and pedagogy by Rev. George R. McNeil.

In addition to lectures by such speakers as George Hindley, Eli Perkins, Dr. W. C. Black, Clifford Lanier, and Hon. Joe Camp, there were several concerts and entertainments. The oratorical contest proved especially attractive, as did also the old style singing contest, the spelling match, and the Drummers' Day.

The management, represented by Pres. Wellington Vandiver, are to be congratulated on the success of this fifth session of the Assembly.

TALK ABOUT BOOKS.

A Critical Study of Shakespeare.

A valuable addition to the literature dealing with the life and the dramatical works of William Shakepeare is a critical study* by George Brandes, the great Danish literary critic. In the concluding chapter the author states that his purpose has been "to declare and prove that Shakespeare is not thirty-six plays and a number of poems jumbled together and read *pêle-mêle*, but a man who felt and thought, rejoiced and suffered, brooded, dreamed, and created." This purpose he has satisfactorily accomplished. By a critical analysis of the dramatist's works he has discovered material with which to piece out the meager authenticated facts pertaining to Shakespeare's life. Tradition and the letters and publications of the period are also made to contribute to the biographical details, but it is upon the testimony of Shakespeare's own works that the author most depends for his statements of the peculiar characteristics of Shakespeare's individuality. In the theme of one play he thinks he discovers something about Shakespeare's habits of work; in another drama he perceives a loathing for the sham; another production reveals the despondency, or the patriotism, or the unhappiness of the great English dramatist, and so on through the list, until we are given a very complete delineation of the dramatist's personality. The peculiar conditions of the times had an influence on Shakespeare, and this also the author considers in drawing the portrait. Another important part of Mr. Brandes' work is the information he imparts concerning the sources from which Shakespeare obtains his plots. It is a masterful work and the criticism of the dramas as works of literary art will help the reader to appreciate the greatness of Shakespeare's genius.

*William Shakespeare. A Critical Study. By George Brandes. Two vols. 411+440 pp. $8.00. New York: The Macmillan Company.

Studies in Literature.

The author of "An Introduction to American Literature,"* recognizing the fact that the history of a country is closely related to that of its literary development, has opened his book with a brief, succinct sketch of the colonial period of American history. Then there follows a chapter on the literature of the same period, which the writer shows is the outgrowth of the historical conditions. The era from 1765 to 1815, when the nation was being formed, and that from 1809 to 1897 are the other divisions of time which he has treated in the same manner. The subject matter of the volume is also biographical and critical, and in their proper places are suggested topics for a more extended study. The appendix is a table of the history and literature of England and America.

An admirable guide to the study of American literature is a volume† by Katherine Lee Bates, of Wellesley College. Literature as the "individual expression of an independent nation" is the real theme of the book, and while tracing the progress of literary history there is in connection with this an outline of historical events which shows the interdependence of literature and history. The colonial, revolutionary, and national eras are the literary periods she treats, and her keen, discriminating estimates of the important writers and their works are lucidly expressed in a dignified literary style. In the appendix there are bibliographies for each period, with valuable suggestions to teachers and questions which are intended for review work. The volume is illustrated with portraits of some of the prominent authors mentioned.

Thirteen years ago the Boston Browning Society

*An Introduction to American Literature. By Henry S. Pancoast. 403 pp. New York: Henry Holt and Company.

†American Literature. By Katherine Lee Bates. 370 pp. $1 00.

was organized, and much of its work represented by essays and discussions has a permanent literary value. A volume entitled "The Boston Browning Society Papers"* contains two dozen of the papers which have been presented to the society since its organization, and among the writers are scholars of recognized literary ability. Among the subjects treated are theism as taught by Browning's poetry, Browning's skill in monologue, his command of rime, his philosophy of art, his theory of romantic love, and nature in his poetry, and there are also several studies in which Browning is compared with Wordsworth, Shelley, and Homer.

"How to Study Shakespeare"† is the title of a very valuable guide intended for the Shakespearian student. Eight plays are studied, and each study is divided into four parts. First, there is an explanation, simple and lucid, of the source of the plot. This is followed by notes, which are explanatory and critical in character. The third division is a table of the characters, which shows in what acts and scenes each character appears, how many lines each speaks, and what minor characters can be represented by one person in a club or reading circle. In the fourth division are search questions on each act of the drama and on the drama as a whole, some of which are answered. Dr. W. J. Rolfe, the Shakespearian critic, is the author of the introduction. This volume should be in the hands of every student of these dramas.

A volume of essays by William A. Quayle opens with a composition on "The Poet's Poet,"‡ which is an appreciative criticism of Robert Browning's work. Cromwell, Burns, Shakespeare, George Eliot, and Hawthorne are some of the other noted people about whom the author has written in a style both pleasing and forceful.

Foreign Lands.

"Yesterdays in the Philippines"‖ is the appropriate title of a volume which is to be commended for its timeliness if for nothing more. But that is by no means its only distinguishing feature. The author's style, vivacious and smooth-flowing, at once captivates the reader, who reads with continuous delight the lively descriptions of oriental scenes and customs and the piquant recital of the writer's experiences in Manila and other portions of the islands. The author, Mr. Joseph Earle Stevens, resided two years, from 1894 to 1896, in the Philippines, where he was the representative of a Boston business firm. During that time he had an opportunity for excursions into the interior and out-of-the-way places, where he picked up the information he has so pleasantly conveyed in this volume. Judging from the pictures with which the volume is illustrated the camera was a constant companion, which has faithfully reproduced some interesting scenes. In typography also the book presents a very pleasing appearance.

In "Journeys Through France"* we are given glimpses of provincial life by Dr. H. A. Taine. Douai seems to have been the place from which he made excursions into the surrounding country some time in the sixties. These he has written about in a terse, vigorous style, and he gives many entertaining details about the country, the people, and their customs. In some of the smaller towns he visited he found art galleries, cathedrals, and other interesting places, which he has pleasantly described.

Georgiana Baucus is the author of a volume called "In Journeyings Oft."† It is an account of the life and travels of Mary C. Nind, who accompanied friends sent to inspect the mission fields of the East, and while relating the incidents in which this noble woman was the chief actor the author gives a very clear idea of customs in Japan and China. Several illustrations accompany the volume.

The twelfth volume of "The Young Folks' Library" deals with Australia‡ and the oceanic islands, including the cold lands of the arctic regions, the islands of the tropical waters, and those of the warmer parts of the temperate zones. The author has described in an interesting way the physical features of the islands, their fauna and flora, producing a book valuable for supplementary reading in connection with the study of geography. The volume is copiously illustrated and several maps are included in the contents.

In June, 1896, three women, two English and a native Finlander, landed at Helsingfors, a port of Finland. After spending a few days here the English women continued their journey for the purpose of sightseeing and learning as much as possible of the country, the customs, and the habits of the people. Mrs. Alec Tweedie was one of them, and she has described this ten-weeks' trip‖ in a

---

*The Boston Browning Society Papers. 511 pp. $3.00. New York: The Macmillan Company.

†How to Study Shakespeare. By William H. Fleming. With an introduction by W. J. Rolfe, Litt.D. 444 pp. $1.00 New York: Doubleday & McClure Co.

‡The Poet's Poet and Other Essays. By William A. Quayle. 352 pp. $1.25. Cincinnati: Curts & Jennings. New York: Eaton & Mains.

‖Yesterdays in the Philippines. By Joseph Earle Stevens. Illustrated. 252 pp. $1.50. New York: Charles Scribner's Sons.

*Journeys Through France. By H. A. Taine, D.C.L. With seven illustrations. 296 pp. New York: Henry Holt and Company.

†In Journeyings Oft. A Sketch of the Life and Travels of Mary C. Nind. By Georgiana Baucus. 334 pp. ——‡The World and Its People. Book VIII. Australia and the Islands of the Sea. By Eva M. C. Kellogg. Edited by Larkin Dunton, LL.D. 448 pp. New York, Boston, and Chicago: Silver, Burdett and Company.

‖Through Finland in Carts. By Mrs. Alec Tweedie. 376 pp. $3.00. New York: The Macmillan Company.

bright, simple manner, relating many amusing experiences which show the peculiar characteristics of the people. The writer gives a vast amount of information concerning this little known country and its people. Excellent illustrations accompany the text.

Whoever cares to know something about Korea and its inhabitants should read Rev. Daniel L. Gifford's "Every-Day Life in Korea,"* which the sub-title calls "A Collection of Studies and Stories." The author first tells about the location of Korea and describes its natural resources, after which he proceeds to a short but comprehensive historical account, following this with a delineation of the daily life of the natives. Missionary work in that distant country receives considerable attention, its development and influence on the country being fully described. The pictorial representations are excellent.

Miscellaneous.

Success in life is what every one desires, but just how to win it or what qualities to cultivate to make it more certain is not always known by young people. In a book† of a few hundred pages Orison Swett Marden tells how some famous people have overcome seemingly insuperable difficulties to obtain an education or carry out some noble purpose. Ambition, enthusiasm, perseverance, and pleasant manners are some of the factors which he declares are indispensable if one wishes to succeed, and he has fortified his statements by numerous examples drawn from life.

A booklet by Charles Follen Palmer is devoted to a study of inebriety,‡ principally as a neurotic disease. The treatise first considers the character of the nervous organization and nerve-force, from certain conditions of which inebriety may arise. Great stress is laid upon the influence of heredity, and in treating of the questions of prevention and cure this is taken into consideration. Valuable thoughts and suggestions are given out in a manner which sometimes requires the use of great mental force to comprehend the writer's exact meaning.

Those contemplating building a dwelling house should read Francis C. Moore's manual on "How to Build a Home,"‖ in which there is information concerning the best and most economical materials to be used, durability, convenience, safeguards against fire, sanitation, and other questions a builder must meet. Sample plans and specifications are included in the contents.

A revised and an enlarged edition of "The Age of Fable,"* by Thomas Bulfinch, has come out in handsome covers appropriately ornamented with an artistic design. To the contents as printed years ago the editor, Dr. J. Loughran Scott, has added something concerning Babylonian, Assyrian, and Phenician mythology. The preface also tells us that several chapters have been rewritten. Throughout the work there are excerpts from poetical works pertaining to the various subjects, and the wealth of illustrations not only makes the book exceedingly attractive but helps to vivify the impression made by the literary parts.

Few people are so skilled in parliamentary law that they do not need instruction on some points liable to come up in even the ordinary meetings. For information on all points we recommend a study of "Shattuck's Advanced Rules,"† which contains in a condensed and concise form all the definitions and principles which a presiding officer is likely to need. This book, the preface states, is intended as a supplement to "The Woman's Manual of Parliamentary Law," by the same author.

One of the arts of which the horticulturist needs to be master is that of pruning. Mr. L. H. Bailey in a monograph ‡ on that subject proves in clear, forceful arguments that philosophy, vegetable physiology, and experience teach that pruning is beneficial. He then proceeds to tell how, when, and where the pruning knife should be used on various fruits and ornamental trees found in North America, carefully explaining the principles which govern the art. He relates his own experiences and cites other authorities in proof of his statements and the illustrations are calculated to aid the horticulturist in carrying out the suggestions of the author.

BOOKS RECEIVED.

AMERICAN BOOK COMPANY, NEW YORK, CINCINNATI, AND CHICAGO.

Redway, Jacques W., and Hinman, Russell. Natural Advanced Geography. $1.25.

THE BLAKELY PRINTING COMPANY, CHICAGO.

Miller, Adam, M.D., Ph.D. The Sun an Electric Light. Demonstrated by Careful Comparisons and Experiments. Paper.

ST. JAMES CUMMINGS, CHARLESTON, S. C.

Cummings, St. James. Staves of the Triple Alliance. Paper, 50 cts.

JOHN LEVERETT, UPPER ALTON, ILL.

Chipman, Geo. E., A.M., LL.B. Outlines of Modern International Law. Paper, 25 cts.

WILBUR FINLEY FAULEY, NEW YORK.

Fauley, Wilbur Finley. Passion Flowers. Paper.

* Every-Day Life in Korea. By Rev. Daniel L. Gifford. 231 pp. New York and Chicago: Fleming H. Revell Company.

† Success. By Orison Swett Marden. Illustrated with fourteen fine portraits of eminent persons. 347 pp. $1.25. Boston: W. A. Wilde & Company.

‡ Inebriety, its Source, Prevention, and Cure. By Charles Follen Palmer. 109 pp. 50 cts. New York and Chicago: Fleming H. Revell Company.

‖ How to Build a Home. By Francis C. Moore. 158 pp. New York: Doubleday & McClure Co.

* The Age of Fable or Beauties of Mythology. By Thomas Bulfinch. A new, revised, and enlarged edition. Edited by Rev. J. Loughran Scott, D.D. 524 pp. $1.25. Philadelphia: David McKay.

† Shattuck's Advanced Rules. For Large Assemblies. By Harriette R. Shattuck. 141 pp. 50 cts. Boston: Lee and Shepard.

‡ The Pruning-Book. By L. H. Bailey. 547 pp. $1.50. New York: The Macmillan Company.

DYSPEPSIA

Horsford's Acid Phosphate reaches various forms of **Dyspepsia** that no other medicine seems to touch. It assists the weakened stomach, and makes the process of digestion natural and easy. **Pleasant to take.**

For Sale by all Druggists.

Enameline

when applied, is most BRILLIANT, and that is the effect you want when using a stove polish. When an old stove is polished it should look as bright as new—that is the result when you use Enameline. It is put up in paste, cake or liquid form. Remember that every package is guaranteed.

J. L. PRESCOTT & CO., New York

Booklets of the New Education in the Church Series

Now Ready. In Uniform Binding.

I. The Bible as Literature.

By W. FIDDIAN MOULTON, of St. John's College, Cambridge, England, with an introduction by Professor R. G. Moulton, of the University of Chicago. 16mo, paper, 48 pp., with cover printed in colors, 15 cents.

"The most censorious will not find fault with the writer's reverent treatment of his theme, and most readers will welcome its fresh views of the old book with delighted interest."—*Sunday-School Journal, New York.*

II. The Golden Rule in Business.

By CHARLES F. DOLE. 16mo, paper, 67 pp., with cover printed in colors, 15 cents.

"It is a grand appeal to practical righteousness and pure Christianity, and ought to be read, studied, and obeyed by all who desire to be, in an earnest and vital way, disciples of Christ."—*The Unitarian, Boston.*

III. Picture-Work for Teachers and Mothers.

By WALTER L. HERVEY, Ph.D., President of the Teachers College, New York. 16mo, paper, 91 pp., with cover printed in colors, double number, 30 cents.

In ten well-defined chapters this prominent teacher of teachers demonstrates and illustrates how to use the Bible stories, the legends of the saints, and the masterpieces in sacred art, in the form of stories and lesson illustrations, as aids in the development of child nature.

Sent postpaid on receipt of price by the publishers,

FLOOD & VINCENT,
The Chautauqua-Century Press, MEADVILLE, PA.

ROYAL

BAKING POWDER

Saves Labor, Time, Money—Makes the food more delicious and wholesome.

Absolutely Pure.

IVORY SOAP

Is used where the most careful selection is necessary

"A PERFECT FOOD—as Wholesome as it is Delicious."

Walter Baker & Co.'s

Breakfast Cocoa.

TRADE-MARK.

THE STANDARD FOR PURITY AND EXCELLENCE....

Costs less than one cent a cup

Our Trade-Mark on Every Package.

Walter Baker & Co. Ltd.

DORCHESTER, MASS.

ESTABLISHED 1780.

One thousand styles and sizes.
For cooking and heating.
Price from $5 to $70.

Often imitated. Never equalled.

Best Cookers. Strongest Heaters.
Last Longest. Use Least Fuel.

Made only by
The Michigan Stove Company
Largest Makers of Stoves and Ranges in the world.
Sold Everywhere.

VOL. XXVIII. NOVEMBER, 1898. No. 2.

THE CHAUTAUQUAN

HARD COLLEGE LIBRARY
OCT 28 1898
CAMBRIDGE, MASS.

DR. THEODORE L. FLOOD, Editor and Proprietor, Meadville, Penn'a.

VOL. XXVIII. NOVEMBER, 1898. NO. 2.

THE CHAUTAUQUAN

A MONTHLY MAGAZINE.

.....CONTENTS.....

Anita Newcomb McGee, M. D. ..... *Frontispiece*

REQUIRED READING.

The Cathedrals of England. II. Illustrated ..... *S. Parkes Cadman, D.D.* 115
The Canning Industry in the United States ..... *Edward S. Judge.* 126
Lord Palmerston ..... *J. Castell Hopkins.* 130
True Greatness ..... *Alexander Maclaren, D.D.* 135
The Chemistry of To-day ..... *Prof. L. H. Batchelder, A.M.* 139
English Colonization in the Old World ..... *Eugene Parsons.* 143

GENERAL READING.

The Nicaragua Canal ..... *Day Allen Willey.* 147
The Klondike Gold Fever ..... *D. Zahn.* 151
The Emperor of Austria ..... *Sydney Brooks.* 153
The Campaign in the Philippines ..... *William Gilbert Irwin.* 158
Some American Women in Science. I. Illustrated ..... *Mrs. M. Burton Williamson.* 161
The Barrys. A Story. Chapters I.–II ..... *Shan Bullock.* 169
The Constituents of the Atmosphere ..... *A. Dastre.* 180

HISTORY AS IT IS MADE.

War Inquiry Commission; Casualties of the War; Columbus' Ashes; The *Maria Teresa;* Winnie Davis; Elections in 1898; The Mormon Church; Neighbor Canada; Turmoil in China; The French Crisis; Anarchy and Assassination; Queen Louise of Denmark; Death and Destruction. Illustrated 185

C. L. S. C. WORK.

C. L. S. C. Outline and Programs 193
Syllabus of C. L. S. C. Reading 194
The C. L. S. C. Classes 202
Local Circles 204
The Summer Assemblies for 1898 211
The Chautauqua Literary and Scientific Circle 218
The C. L. S. C. Class of 1902 220
The C. L. S. C. Graduate Courses 222
Chautauqua Young Folks' Reading Union 224
Talk About Books 214

DR. THEODORE L. FLOOD, Editor and Proprietor, Meadville, Pa.

NEW YORK, Bible House.
LONDON, Kegan Paul, Trench, Trübner & Co., L't'd, Paternoster House, Charing Cross Road, W. C.
DUNDEE, SCOTLAND, Rev. Donald Cook, 6 Albany Terrace.

Entered According to Act of Congress, November, 1898, by THEODORE L. FLOOD, in the office of the Librarian of Congress, Washington, D. C.

Yearly Subscription, $2.00.

ANITA NEWCOMB M'GEE, M. D.

See page 161 and "History As It Is Made."

THE CHAUTAUQUAN.

VOL. XXVIII. NOVEMBER, 1898. No. 2.

OFFICERS OF THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

JOHN H. VINCENT, *Chancellor*, 613 Mooney Building, Buffalo, N. Y. All "personal" letters should be so marked on envelope. LEWIS MILLER, *President*. JESSE L. HURLBUT, *Principal*. *Counselors:* LYMAN ABBOTT, D. D.; BISHOP H. W. WARREN, D. D.; J. M. GIBSON, D. D.; W. C. WILKINSON, D. D.; EDWARD EVERETT HALE, D. D.; JAMES H. CARLISLE, LL. D. MISS K. F. KIMBALL, *Executive Secretary*. A. M. MARTIN, *General Secretary*.

HARVARD COLLEGE LIBRARY
OCT 28 1898
CAMBRIDGE, MASS.

REQUIRED READING FOR THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

THE CATHEDRALS OF ENGLAND.*

BY S. PARKES CADMAN, D. D.

II.

HOWEVER ignorant one may be of the spirit and technicalities of architecture, it is impossible to stand in the shadow of Westminster Abbey without feeling that it is as true an embodiment of worship as a prayer and less fugitive than the breath of a psalm or an anthem. Mighty masses of brute material have here been manipulated by marvelous genius; it has given them wings and made them to soar into the heavens. Three is the prevalent number of the abbey, triple height, triple length, triple breadth—to remind us of the doctrine of the Trinity. Its structure is cruciform, in honor of the Atonement. The geometrical designs which lie at the base of its ground-plan are combinations of the triangle, the circle, and the oval, used in medieval masonry to indicate the Trinity, eternity, and the aureole of the saint. These elaborate tokens are in rich profusion and extend to the minutest details of the building.

WEST FRONT OF WESTMINSTER ABBEY.

It needs more than a little discernment to observe where the work of Edward I. joins on to that of Henry III., and that of Richard II. to that of Edward I., and that of Henry V. to that of Richard II. The later additions, including the great western window and the glorious chapel of Henry VII., exhibit the English Perpendicular style in all its perfectness.

The building is a fit setting for the gems

*The Notes on the Required Reading in THE CHAUTAUQUAN will be found following those on the books of the course, in the C. L. S. C. Department of the magazine.

REREDOS IN WESTMINSTER ABBEY.

of historical association which center within it. It is not only holy ground, it is classic; and beneath these stones there sleeps the mightiest dust of the English race. In Poets' Corner stood Will Shakespeare and Ben Jonson and Chris Marlowe, when they flung their pens and their verses upon the coffin of Edmund Spenser. Here Samuel Johnson knelt in tears at the funeral of Oliver Goldsmith. The grave of Chaucer was the magnet which drew into its neighborhood the tombs of the poets, the musicians, the novelists, and the historians of four hundred years. From the corner of the south transept, stately and serene Joseph Addison gazes down upon the last resting-place of Macaulay and Dickens and the two great Victorians, Robert Browning and Alfred Tennyson. Hard by the memorial to Shakespeare is a marble bust of Henry Wadsworth Longfellow, bearing the inscription:

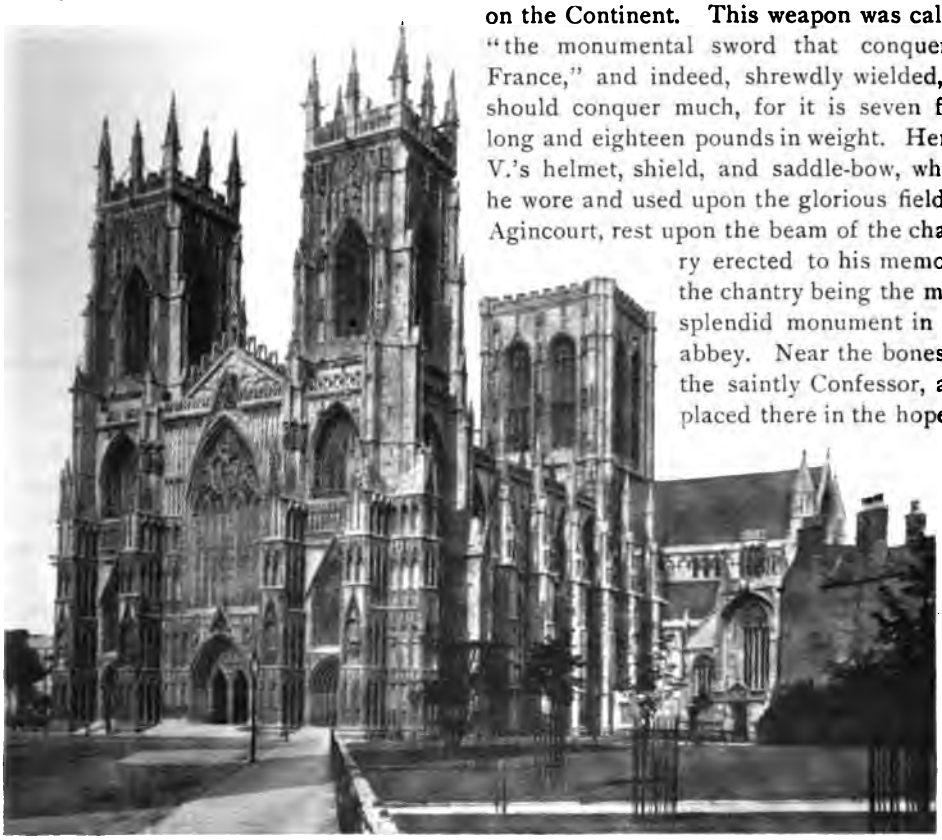
Erected by English admirers of an American poet.

Leaving the south transept you stand before the high altar of the choir. In monastic days seven services were held every twenty-four hours, called lauds, prime, tierce, sext, nones, vespers, and compline. But earth's richest mausoleum has witnessed other scenes than those of pious devotion. William the Conqueror was crowned here amidst calamitous confusion on Christmas Day, 1066 A. D. His predecessor, Edward the Saxon, saint and confessor, is buried immediately behind the high altar, in soil

POETS' CORNER, WESTMINSTER ABBEY.

brought from the Holy Land for that purpose. He has the most honorable place of sepulcher, and deserves it, for he spent one tenth of the national income upon the abbey during the fifteen years of its building by him.

Henry III.'s passionate addiction to art was only equaled by his extravagance. He rebuilt the abbey at a cost of £500,000 ($2,500,000). The Stone of Scone forms the seat of the coronation chair, a rude unchiseled block, and yet the principal monument of the unity of the empire. Legend declares it was Jacob's pillow at Bethel; it stood on Ireland's sacred hill of Tara, and was known as "the stone of destiny." Fergus took it to Scotland, Kenneth II., 840 A. D., moved it to Scone, the ancient capital of that realm, and Edward I. was crowned upon it as monarch of Scotland broad. From that time (1307) all English sovereigns have been inaugurated in the chair he built. Only once since then has it left the abbey, when Oliver Cromwell was installed as lord protector of the Commonwealth.



YORK MINSTER, FROM THE SOUTHWEST.

Leaning against the screen of the altar are the sword and shield of Edward III., carried before him during his state progress on the Continent. This weapon was called "the monumental sword that conquered France," and indeed, shrewdly wielded, it should conquer much, for it is seven feet long and eighteen pounds in weight. Henry V.'s helmet, shield, and saddle-bow, which he wore and used upon the glorious field of Agincourt, rest upon the beam of the chantry erected to his memory, the chantry being the most splendid monument in the abbey. Near the bones of the saintly Confessor, and placed there in the hope of sharing his sanctity, lie the bodies of Henry III., Edward I., Richard II., Henry V., and of Queen Edith, good Queen Maud, Eleanor of Castile, Philippa of Hainault, Anne of Bohemia, and Catherine of Valois.

The late Lord Tennyson traced his descent from the Plantagenet king, Edward III., and it is interesting to note the striking resemblance between the features of the laureate and those of the effigy upon the tomb of the monarch.

At the eastern extremity of the building stands the lady-chapel, dedicated to the

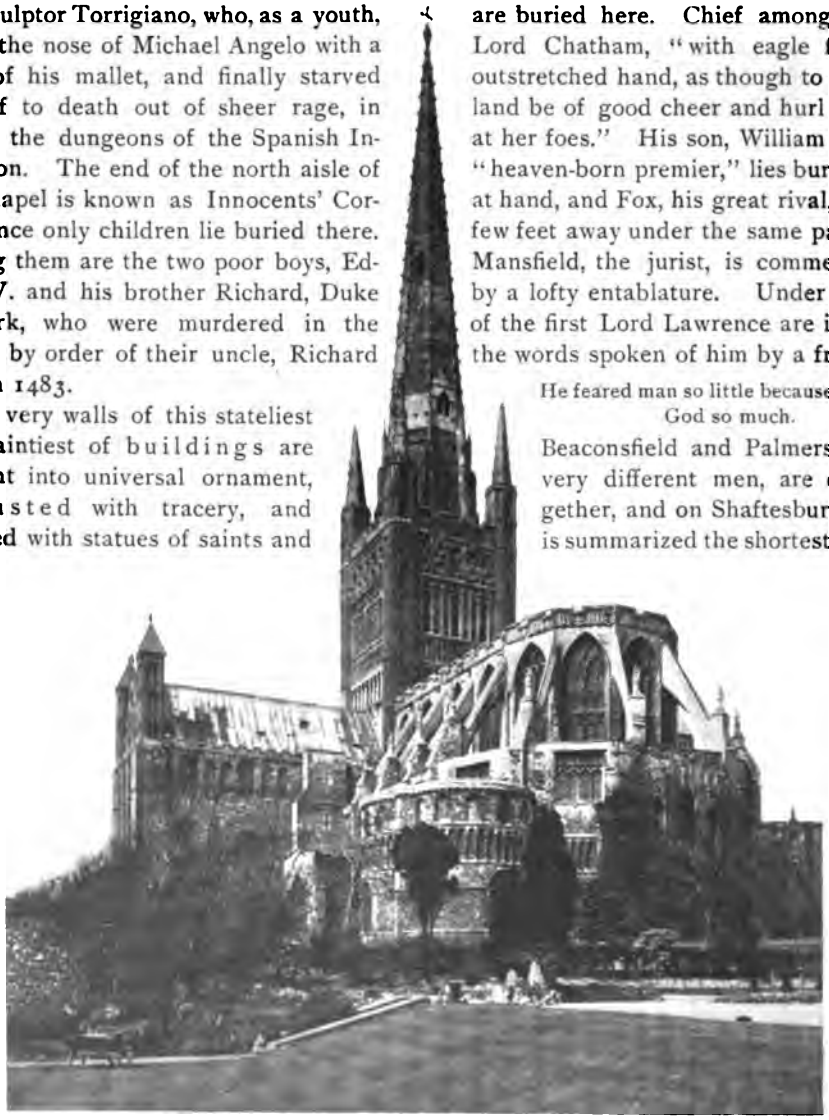
Virgin and built by Henry VII., the quiet, intense, crafty, and determined founder of the fortunes of the House of Tudor. The stalls of the choir are exquisitely and elaborately carved; above them hang the faded banners, overladen with dust, of the Knights of the Bath. The magnificent tomb in the center is that of the founder of the chapel, his wife, Elizabeth of York, sleeping by his side. It is not too much to say that to describe the tomb adequately would exhaust the space of this article. The bronze closure around it is the work of the Florentine sculptor Torrigiano, who, as a youth, broke the nose of Michael Angelo with a blow of his mallet, and finally starved himself to death out of sheer rage, in one of the dungeons of the Spanish Inquisition. The end of the north aisle of this chapel is known as Innocents' Corner, since only children lie buried there. Among them are the two poor boys, Edward V. and his brother Richard, Duke of York, who were murdered in the Tower by order of their uncle, Richard III., in 1483.

The very walls of this stateliest and daintiest of buildings are wrought into universal ornament, encrusted with tracery, and crowded with statues of saints and martyrs. The stone roof seems, by the cunning labor of the chisel, to have been robbed of its weight and density and suspended aloft, as if by magic, with the wonderful minuteness and airy security of a cobweb. In one of the aisles the coffin of Elizabeth rests on the coffin of Mary—the executioner and the executed sleeping together in the reconciliation of death.

Passing from the lady-chapel to the north transept the visitor stands in Statesman's Aisle, so-called from the number of diplomatists, ministers, and ambassadors who are buried here. Chief among them is Lord Chatham, "with eagle face and outstretched hand, as though to bid England be of good cheer and hurl defiance at her foes." His son, William Pitt, the "heaven-born premier," lies buried close at hand, and Fox, his great rival, is but a few feet away under the same pavement. Mansfield, the jurist, is commemorated by a lofty entablature. Under the bust of the first Lord Lawrence are inscribed the words spoken of him by a friend:

> He feared man so little because he feared God so much.

Beaconsfield and Palmerston, two very different men, are close together, and on Shaftesbury's tomb is summarized the shortest possible



NORWICH CATHEDRAL, FROM THE SOUTHEAST.

WELLS CATHEDRAL.

exhortation to a noble and unselfish career in the two monosyllables,

Love. Serve.

Mr. Gladstone's grave is in this transept, near the choir.

In the adjoining church of St. Margaret's is the window unveiled by James Russell Lowell. Among the few donors to this venerable pile in recent years is George W. Childs, of Philadelphia, and on the grave of Livingstone these words occur — the last recorded words he ever wrote, and found beneath his hand where he lay dead in the African jungle:

All I can add in my solitude is, May Heaven's rich blessing come down on every one, American, English, or Turk, who will help to heal this open sore of the world [*i. e.*, the slave-trade].

Two of America's best friends deserve mention, Dean Stanley and John Wesley. On Dean Stanley's altar tomb is a characteristic inscription:

I know that all things come to an end;
But thy commandments are exceeding broad.

Under the cenotaph of John and Charles Wesley is carved one of John's famous sayings,

The best of all is, God is with us.

The chest in which the remains of Major André were transported from the United States to England in 1821 is preserved in Jerusalem Chamber. Much of the old Benedictine monastery is still in existence. The Westminster Confession was drawn up and the Old Testament revised in the Jerusalem Chamber of the abbot. Parliamentary legislation for three hundred years, during which period the foundations of civil and religious liberty in England were laid, was enacted in the chapter house. Even to-day the Chapel of the Pyx contains the standards of gold and silver for the British Empire. From the vaults of this abbey the bodies of Cromwell, Ireton, and Bradshaw were dragged to Tyburn for mutilation and insult.

One is reluctant to leave Westminster, for in a unique and peculiar sense it is the common property of the Anglo-Saxon race. Long before our fathers had turned their faces to the West they brought here their mighty dead and buried them with lamentations and with pride. The abbey, beyond any spot on earth. recalls and retains the precious heritage of common blood and lan-

LICHFIELD CATHEDRAL.

guage and national desire, which turned the tide of battle on many a fatal field and wove around the world the romance of adventure, the golden chain of commerce, and the reproductiveness of colonies. It now draws multitudes of worshipers from every part of the world, including many from our own land, and its future promises to be more glorious than its past. For here, if anywhere,

Where still the hand and still the tongue
Of those who fought and spoke and sung,
Here where the fretted aisles prolong
The distant notes of holy song,
As if some angel spoke again,
"All peace on earth, good will to men"—
If ever from an English heart,
Oh, here let prejudice depart.

York Minster was described in 1430 by Æneas Sylvius, afterward Pope Pius II.,

GLOUCESTER CATHEDRAL, FROM THE SOUTHEAST.

the Christian worship of a reunited race will rise in devotion and in praise, and will labor to meet the strength and weakness of succeeding days, to inspire new meanings into ancient forms, and embrace within itself the higher aspirations which lead us up to God.

In view of the deeper feeling for peace and concord so happily prevalent at this juncture between England and America, the words of Sir Walter Scott, when he remembered the two mighty rivals Fox and Pitt, resting within a few feet of each other, come naturally to our hearts.

Here, where the end of earthly things
Lays heroes, patriots, bards, and kings,

as the most notable church in all the world for size and style. The north and south transepts are of the Early English, the nave and chapter house of the Decorated style (1285–1345), the choir and the towers of the Late Perpendicular (1405–70). The fourteenth century style of building is at high-water mark in the west front. The great east window has been described as the finest window in the world, although Gloucester disputes the claim. The sumptuous stained glass which adorns every part of the building; the rich, lierne stone vaulting, with its many bosses, in the main transept; the foliated moldings of the arches; the gables

filled with fine and lofty lancet windows; the famous "Five-Sisters," through whose diapered glass struggles the solemn light—these are worthy of the metropolitan church of the northern province and the ancient city of one of the emperors of Rome. The extreme length of the cathedral from east to west is 524 feet; the length of the transept from north to south, 222 feet; the nave is 99 feet high; the height of the two western towers is 196 feet, and of the great central tower, 213 feet.

The city itself is an ancient Roman foundation and still retains its walls intact. One may walk for two and three quarter miles upon their ramparts. In 735 Egbert received the pallium as archbishop from Pope Gregory III., and in the school which he founded, Alcuin, *magister scholarum*, was educated. In 1070 Sweyn and his rude Norse rovers burnt the minster to the ground. With the coming of the Normans began its latter glory, and to-day the various styles of building, like the differing notes of a grand chord of music, blend together in richest structural harmony.

Prominent among the archbishops of York were Geoffrey Plantagenet, illegitimate son of Henry II. and "Fair Rosamond"; Walter de Gray, a princely diplomatist who brought about the marriage of Margaret of England to Alexander III. of Scotland; John of Thoresby, whose brief catechetical statement is the first faint shadowing of an English ritual; Thomas, Cardinal Wolsey, and John Williams, the great rival of Laud. Archbishop Magee, considered by competent judges the most eloquent preacher of the Anglican Church in this generation, was a recent metropolitan, and the present holder of the see is Dr. Maclagan, promoted thither from Lichfield. The salary of the office is $50,000 per year, and the chapter consists of a dean and four resident canons.

Lincoln Minster is seated in queenly majesty on what Wordsworth so aptly styles "her sovereign hill." The church looks down in serene repose from a northern height upon the din and turmoil of the busy streets of the factory town. The building may be seen at a distance of twenty miles because of the general flatness of the country around it. Down in those marshy regions lies Epworth Rectory, where Susannah Wesley reared her great sons for the service of the church. At Somersby Alfred Tennyson was born, amid the cloisteral calm and well-ordered life of another of the rectories of this diocese. Some of the most famous of the Puritans lived adjacent, and the country overlooked by Lincoln's towers is full of richest interest to the American tourist.

ST. ASAPH'S CATHEDRAL.

The chief architectural feature of the cathedral is its central tower, a beautiful model which has been copied in all Christendom. The view from the western door cannot be well described; the rich columns, the pointed arches, the lightness, and the elegance of the general prospect remind one of the sublime and majestic interior of York Minster, in many respects a kindred church. The big bell in the northwest tower weighs 5,800 pounds and is six feet ten inches in diameter.

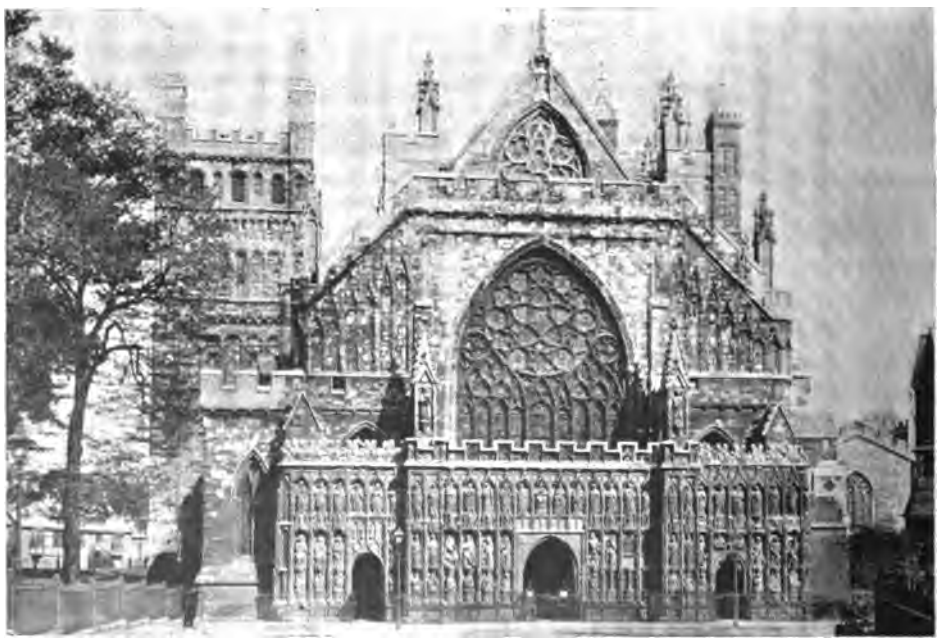
The first Norman bishop was Remigius, appointed in 1067; dwarfish in stature,

dark in complexion, undignified in aspect. "Nature," says William of Malmesbury, "seemed to have formed him to show that the noblest spirit might dwell in the most wretched body." He built the church and summoned all England to its consecration. There are still traces of the almost savage plainness of the Early Norman style he adopted. Following in the succession came Alexander the magnificent, the doer of great deeds. He fell from his horse and died of apoplexy while following the chase in Woodstock Park. The robbery of the see by the greedy statesmen who were the guardians of Edward VI. compelled the bishops to vacate the palace, which had been their residence since the beginning of the twelfth century.

Here had lived St. Hugh and Grosseteste, and Alnwick, the adviser of Henry VI. when he built Eton College and King's College, Oxford. Here came Henry VIII. and his fifth queen, the loose-living Katherine Howard, who, the next year, lost her head for acts of some of which this palace was the very scene. Robert Sanderson (1660–63), the first casuist of the English Church, and Richard Fleming, who exhumed and burnt the bones of the godly John Wyclif, and also founded Lincoln College, Oxford, were among the bishops of Lincoln. The cathedral library contains one of the four original copies of the Magna Charta and a most valuable collection of manuscripts.

Lichfield lies in the center of ancient Mercia, the last of the Anglo-Saxon kingdoms to receive Christianity. St. Chad (669) became the great patron saint of a diocese which to-day preserves the memory of more than one thousand Christians martyred by Diocletian, the Roman emperor.

From 779 to 803 Lichfield was elevated into an archiepiscopal see. During the civil war the cathedral underwent sad desecration at the hands of the Royalists, who changed the temple into a fort. Three times was it captured and profaned by hostile armies, and no cathedral in England has been so much despoiled of its ancient memorials and its illustrious dead as that of Lichfield. Dr. Johnson was a native of this city, where his father was a bookseller, and his bust adorns the church. The three spires, the beautiful statuary by Chantrey, known as "the sleeping children," and the Hiberno-Saxon volume of the Gospels, said



WEST FRONT OF EXETER CATHEDRAL.

to have been owned by St. Chad, are among the treasures shown to the visitor.

Norwich, founded in 1096, was first built of wood, and afterward largely destroyed by fire. During the suppression of the monasteries it suffered great damage. The diocese comprises the counties of Norfolk and Suffolk and eleven parishes in Cambridgeshire. From the year 630 until the present day East Anglia has thus possessed this religious foundation. Edward Stanley, father of the great dean of Westminster, was bishop here from 1837 to 1849.

Wells Cathedral is situated in a rich and fertile valley to the south of the Mendip Hills. Close at hand is a transparent lake of water in which the building stands reflected. Unlike many structures previously named, the one now under observation affords no example of Norman workmanship; it is uniformly of the later date. Thomas Ken, the author of the Evening Hymn, and the greatest bishop of Wells, was born in 1637. Saintly in character, but intrepid in principle, Ken refused to allow his house at Winchester to be used as a lodging by one of Charles II.'s courtesans, Nell Gwynne. Notwithstanding this the king appointed him to the see of Bath and Wells; about the last act, and one of the best, of his unworthy life and reign.

Notwithstanding the sins of the Stuarts, Ken refused to acknowledge William and Mary, thus showing the grip of the superstition of the divine right of kings on an otherwise powerful and pious mind. He lived for twenty years with his generous and devoted friend, Lord Weymouth; and on the 19th of March, 1711, he fell asleep, leaving behind him a blessed and fragrant memory.

A stranger gazing upon the solemn beauty of Gloucester Cathedral would not at first deem it a church built by the Normans. But when he examined the coronet of chapels surrounding the soaring choir, he would find among them the unmistakable evidences, grand beyond expression, of these master masons.

This is the same cold, white nave upon which Anselm gazed as he preached, and through which Maud, the empress, went to her prayers with her half-brother, Earl Robert. Beauclerc, her father, and the gray-haired survivors of Hastings have often

CHOIR OF EXETER CATHEDRAL.

looked on the enormous round shafts, and the tramp of their mailed feet has rung on the stone pavements. The monk and architect, who in his cell devised the airy fabric of the choir, knew that the pale blue sky of the Severn lands was very dim and lightless compared with the brilliancy of the southern heavens. So he planned the largest painted window in Europe, filling the eastern end of the cathedral, seventy-two feet high and thirty-eight wide.

The glass has been marvelously preserved. Neither the ravages of the weather, nor the revolutionist, nor of the busy restorer, have been inflicted upon it. Here are emblazoned forty-nine figures and eighteen armorial shields, thirteen of which are certainly the identical ones inserted by the survivors of Cressy. In fact, the window was a memorial of the victory, and among the coats of arms are those of Edward III. and the "Black Prince" and their knightly companions in that famous campaign.

WEST FRONT OF ST. PAUL'S CATHEDRAL.

When Edward II. lay brutally murdered in Berkeley Castle, some seventeen miles from Gloucester, no religious house dared offer him burial, for they feared the vengeance of his consort Isabella, the Jezebel who had done him to death. Brave old Abbot Thoky boldly sent to Berkeley and begged that the body of the dead king might be buried in his church, where his sepulcher is unto this day. Here also are the tombs of Osric and Ethelred, kinsmen of Penda and kings of Mercia; and on these worn flags, beneath the somber arches overshadowing them, have knelt and prayed Godwine and Harold, Gurth and Leofwine, Eustace, Tostig, Aldyth, and Edith.

The Welsh cathedrals are those of Llandaff, St. Asaph, Bangor, and St. David's, the latter being the most important see of the principality. Exeter is famous for its western window and a magnificent organ, whose pealing notes rang out a triumphal march of welcome as William of Orange passed beneath after landing at Torbay.

Hereford and Worcester both belonged to the ancient see of Mercia, of which Lichfield was the constituted head. Ripon and Peterborough are the development of Benedictine monasteries, founded in 661 and 665 respectively.

Chester's somewhat uninteresting structure has been elaborately restored, and in this palatine city every phase of human life existing here for nearly two thousand years can be identified by its various buildings. Bath and Chichester, Rochester and Carlisle, Manchester and Liverpool, have claims upon the reader's attention which, if subordinate, are not to be despised. And I conclude this brief mention by naming St. Paul's in London as the one cathedral church in the style of the Renaissance which exists in England. St. Peter's at Rome is 630 feet long, 440 broad, with a nave width of 220 feet, and height of dome, 438 feet. To make the comparison remember that St. Paul's is 500 feet in length, 250 feet broad, and has a width of nave of 115 feet, the dome being 365 feet high. For balanced regularity and ordered magnifi-

cence St. Paul's is worthy of the title "The second church of western Christianity."

The ground-plan is a Latin cross, and the general outlines have what Augustus J. C. Hare called "a peculiar sooty dignity all their own." The chief features, architecturally, are, first, the western front, and, secondly, the mighty dome, which mothers the mightier city.

ST. PAUL'S CATHEDRAL, UNDER THE DOME.

From the far-away days of hoary antiquity Ludgate Hill has been the site of a temple. The church destroyed in the great fire of London was nearly 600 feet long and 140 feet high to the ridge of the choir roof, while its spire reached a height of 460 feet. Like all buildings of its time it was in the Gothic style.

In this building were the monuments of Ethelred the Unready, John of Gaunt, Sir Philip Sidney, brought here from Zutphen, and Nicholas Bacon, father of the great chancellor. Queen Elizabeth held public thanksgiving in old St. Paul's for the defeat of the Spanish Armada, a banner from the captured galleons trailing forty feet behind her in the dusty procession. The present erection was completed in the lifetime of one dean, one bishop, and one architect, Sir Christopher Wren. Under a black marble sarcophagus in the crypt, intended by Cardinal Wolsey for himself, lie the remains of Nelson, the lord of the sea. He is surrounded by his companions in arms, Rodney, Howe, and Collingwood. Many years later the British nation buried here Arthur, Duke of Wellington, whose somber and magnificent tomb befits a Cæsar.

THE TOMB OF WELLINGTON, ST. PAUL'S CATHEDRAL.

The choir, with its cunning carvings by Grinling Gibbons; the vast basal area used by thronging multitudes; the whispering gallery; the festival in which five thousand charity children sing every first Thursday of June; the pulpit, with its memories of South, Tillotson, Stillingfleet, Bloomfield, Coley, Milman, Church, and Liddon—these are among the glories of London's metropolitan church and Wren's finest production. The memorial inscription on the portico of the north transept amply suffices for the claims of the architect:

Si monumentum requiris, circumspice.

THE CANNING INDUSTRY IN THE UNITED STATES.

BY EDWARD S. JUDGE.

SECRETARY OF THE NATIONAL ASSOCIATION OF CANNED FOOD PACKERS.

A MODERN proverb, having a scientific parentage, says "A man is what he eats," and this truism, taken in connection with the cosmopolitan effects of modern commerce, must make the new proverb apply to states, nations, peoples, and races, just in proportion as they are influenced by modern civilization and affected by the fashion that governs eating. Thus we would amend the proverb to read "A nation is what its people eat," and we would begin to get at the root causes of some of the mysteries of human progression.

Of course man is little more than a peripatetic plant, as much connected with the earth in his physical nature as is any tree deep-rooted and anchored in the soil. The very air he breathes is saturated with the powers of the globe it envelops, and thus all his connections and environments tend to produce similarity in tastes, manners, energy, and ambition in the peoples of any special section, and as time passes extends these effects and resulting similarities to wider and wider areas, as though nature were operating to remove the dissimilarities of nations, as it is removing them from the people of a nation and already has removed them from families and tribes or clans.

A comprehension of this effort and purpose of nature and of the extraordinary advantage its consummation will be to the human race will convince the least thoughtful mind that a general distribution of food is of the greatest importance. The advent of the millennium itself may be said to depend on it. There are two natural powers always contending for control within the cosmos, and we presume beyond it; these are progress and conservatism. One represents the virility of being, the other the effeminacy of negation. One succeeds by effort to produce whatever it needs, the other by a miserly clinging to that which has been attained.

Patriotism is a good thing, but a too exclusive intermarrying in any nation will reduce the virility of its people to the lowest ebb and soon make them slaves to foreign neighbors; nature's effort to force a cure. It is the mingling in America of all the strains of blood of the world that has made our people the most energetic, independent, and progressive on earth.

The assimilation of all the foods of mankind will have nearly the same effect on a nation, and this is the reason why insular peoples are generally more active, advanced, and brave than the interior dwellers of continents. In our own times England and China illustrate this fact strongly. The Asiatic, inbred and subsisting mainly on rice, is a sample of national decay that only time and innate conservatism can produce; while the Briton has all the force and all the virtues the other lacks. The Hebrew race is a living proof of the advantage of the change of food, air, and country, even to a people who dogmatically intermarry.

To students of history it is a question whether the Anglo-Saxon or the Norman spirit produces the better humanity. The former as it exists to-day contains more cubic inches of conservatism than the latter, which in mingling with the Latin blood seems to have gained in brilliancy what it lacks in fortitude. The Briton gets his beefy stamina from the ox which he devours, the Gael his *elan* from the wine that is his blood-maker. The American is the combination of both. But the progressive and aggressive man is never content, and it is generally conceded that it is the dissatisfied man who makes the world move on. It seems to be a fact standing out in history that republics lead the world in original thought in every line of life, and

the latest revolution in the production, preservation, and distribution of food, one of the many triumphs of the nineteenth century, must be added to the evidence upon this assertion.

The comparatively new and extraordinary industry of hermetically sealing fresh foods of all kinds in tin, known as the "canned goods business," is by degrees occupying the entire field of domestic food preparation, yet it has received little or no attention from the "literati" who purvey historical pabulum to contemporaneous humanity. Yet the industry has laid prehensile hands on almost every food of every clime, until it has become the veritable handmaid of nature for the cosmopolitan improvement of the race.

It was intended to make a grand presentation of the industry at the Columbian Exposition in Chicago, but at the last moment, after the scope of the plan had received the hearty approval of Director-General Davis, it had to be abandoned from lack of space on which to erect a building that would contain the display. The indications are that the industry will continue to grow and extend its scope until every article of food produced in any part of the world will be procurable in every other part, and further that all cooked foods will be prepared by skilled and scientific cooks, to the displacement of dyspepsia and slatternly ignorance and for the solution of the problem of housekeeping. This industry has no ancient history; it is the direct outcome of modern progress and its mission is to give to all mankind luxuries which only princes could afford in the centuries gone by. It may therefore be termed one of the flank movements of natural socialism, for anything that gives the masses the advantages which have been enjoyed only by the aristocracy tends to topple crowns in the dust and make the man more valued than the raiment.

The industry is not due to any accidental discovery, nor to any scholarly scientific research. It was the result of years and years of experience of a most unique and unsociable worker among the poorest of French employees, in the latter half of the eighteenth century. Nicolas Appert, of whose birthplace we know nothing, spent a life of ninety years in a line of collateral industries, and through all the plodding patience of employment to secure a living seems to have kept a discerning mind on the subject of preserving alimentary substances in their natural state. He was in turn brewer, winemaker, pickler, and confectioner, an investigator and experimenter always, and it is a matter of tradition that, like some of our American mechanical inventors, he would let his family want while he spent his earnings in his investigations.

This, when it succeeds, we call genius; the far eastern people call it fate. But, whatever it may be, when in 1795 the French government, the Republican Assembly, offered a prize for the best method of preserving food, Appert captured it, although he had Gay-Lussac and other scientists as competitors. Appert, however, used only glass vessels in his process; we have to thank an Englishman for the tin-can substitute, and the world is indebted to America for making a great industry of this and developing its possibilities. As a matter of fact, the vast extension of this business is due to the currency inflation and high wages produced by our Civil War. Great success of any business must depend on the ability of the masses to consume its products, and canned goods are essentially the food luxuries of the toilers. The miner, the logger, the sailor, and soldier regard them now as necessaries, and the retail grocery is rapidly becoming a storehouse of goods in tin. The market-basket of the wife of the wage-worker is the fly-wheel which drives the canning factory.

But, while this modern industry is at once improving the physical, mental, and social condition of the masses, it seems to the observer that domestic powers are neglectful of the opportunities it brings to them. A study of the characteristics of nations has taught us that in proportion as nature does much for a people they do less for themselves, that where food, clothing, and shelter are unnecessary or are provided

ready-made by nature, mankind gives least attention to the future provision, and it seems that as science and systematic industry provide prepared foods in greater variety and improved culinary quality the housekeepers more completely neglect their duties. Or is this but another phase of the transposition of the duties of the sexes, that as men are endeavoring to repair the deficiencies caused by the hegira of woman from her normal field, the success of his efforts only increases the desertion by removing the least necessity for her remaining?

Whatever the cause, such is the effect in respect to canned goods. It should be understood that the *raison d'être* of this industry is to give to mankind all the world over the food from other sections and climes which would not keep fresh and wholesome if transported in their natural state. The whole problem is summed up in the ability to put such luxuries in the hands of the masses at low prices. Therefore when we find a canner putting up food that will keep equally well without hermetical sealing we know it can be but a matter of time for him to find it a losing business, for who will pay ten cents per can for soaked peas (or other soaked goods) when she can buy four times as much of the same article in the dry state for ten cents and soak them herself? The canner should confine himself to the legitimate purpose of his business, viz., the preservation of perishable foods by hermetically sealing them; and the housewife should understand that the goods as they come from the can are only ready for the cook.

The old proverb says, "God sends the victuals, but the devil sends the cooks." Yet our modern woman, who has set out to occupy the masculine fields of business, seems to have decided that the easiest way to right this wrong is to abolish the cooks and eat the goods as the Lord sends them to her. Probably the great bulk of canned meats, fish, and vegetables, to say nothing of fruits, milk, etc., are eaten as they come from the can, with a resulting sameness that greatly injures the popular appreciation of the goods.

Many things, however, are preordained, and this neglect of the housekeeper may be but the preparation of destiny for the advent of the better time, when the canners will prepare all things for the table; when meats will be procurable in tin in any style of roast, broil, fry, fricassee, soup, stew, or hash, and vegetables or fruits in equal variety of preparation. Then the modern kitchen and cook will be displaced by the well-filled pantry of tinned foods and the electric heater.

Meanwhile the industry has had one great handicap, viz., the consumer has had to do what Pat calls "buy a pig in a poke"; the label has been the only guide to the quality of the contents, and swindlers of all sorts have taken advantage of this to sell inferior goods at high prices under a gorgeous label, changing the style of the latter from year to year so that the public could not follow and reject the poor goods. But the canners, after nearly twenty years of effort and organization, have, through their local and national association, arrived at a method that will give the public security in buying these goods.

The "National Association of Canned Food Packers" has a registered seal, and the use of this seal in any label on any canned goods will be a guarantee that the goods in the tin on which it appears are fully up to the standard fixed by the association. If otherwise, the canner will be liable to prosecution for misuse of the seal and will be sued for damages.

It is not possible to allow the goods to be examined before purchase, for if a can be opened to permit this the contents will rapidly spoil from access of the air. As this rule governs in all cases, the goods must go to the housekeeper exactly as they leave the canner, so far as the quality of the contents of the can is concerned. This should be of advantage to the consuming public, for it unquestionably makes it impossible for the vender to adulterate the goods, and, if the responsibility can only be fixed on the canner, so that he will suffer in reputation if his goods are not what they should be, he will have to furnish goods

satisfactory to the public at all times or go out of business.

But as the contents of every can are a mystery until it is cut open and thereafter cannot be returned if not as represented, there remains always the opportunity for the swindler and speculator. These were not slow to avail themselves of it. It would seem that the label would provide a means to prevent deception, it being necessary in all cases to label each can to indicate the variety of goods it contained. While prices of canned goods were high and profits good the label seemed to suffice, but when canneries multiplied and competition reduced prices and wiped out profits, labels began to be misleading, inferior goods were branded as of higher quality and were sold as such. But the public became disgusted and the business suffered. Many of the packers, of course, would not be guilty of such dishonesty, but when the honest goods of an honorable firm were labeled "standard" and came in competition with dishonest goods, also labeled "standards," the wholesale price of the honest goods was broken down to that of the cheap goods and many honest packers were forced out of business rather than continue selling below cost. For the canners were not the only ones to blame in this misuse of labels. A word of explanation here will benefit the public.

There are no natural foods that are all perfect or all alike in quality. Selection is therefore the prime operation in the cannery, and as a result they are compelled to have "standards," "extras," and "seconds." "Standards" are the normal article in its natural state, as far as possible, "extras" being the choicest goods selected from the mass, and "seconds," or second quality as compared with "standards," being such as are rejected because not good enough for "standards." In fruits there is a still lower grade known as "pie fruit," which contains all that is too hard or too soft, windfalls, and such as lose their natural form. "Standards" in fruit are pared and put up in a good syrup, made of sugar; "extras" are pared and put up in a heavy syrup; "seconds" are put up in water and are generally unpared, and "pie fruit" is put up in water and is unpared. It is evident the inferior grades can be put up much cheaper than can "standards" or "extras," and also that these two grades have to bear the main expense of the first cost of the goods, because the more careful the selection of the goods for these two grades the larger will be the quantity rejected that will have to go into the cheap grades and the higher will be the first cost of the finer grades. Herein comes the opportunity of the swindling speculator.

Selecting some canner who has a good reputation, he offers to buy a large lot of his "standard" goods, if he can get them at five or ten per cent below the price at which the same goods have been sold to any other party. Of course the offer is declined. Then he offers to take the goods at that price, without labels on the cans, and label them himself, which is also declined, as the goods cannot be packed of "standard" quality for that price. Then he says he does not care what the quality of the goods is, only so they are labeled "standard." If one packer will not meet his views another will, or he will buy a lot of unlabeled goods, of second quality (at a low price), and label them "standards" or even "extras" if he have assurance enough. They are sold to the retail grocers as a bargain below the price of "standards," but at a big profit to the speculator. The industry is injured in general estimation, the canner is injured, not only in reputation but the price of his honest "standards" is lowered by these cheaper, bogus "standards," and the public is swindled as well as disgusted. It would seem that this was a proper place for the application of law, but there is no law that would directly apply to it. It was not an adulteration, even when the can was half filled with water, or was only half full. It was understood some years ago that Congress could not enact a national law to require honesty in food matters, as that was a prerogative of the states, but the Interstate Commerce Act showed the way to overcome that difficulty.

After getting many of the states to enact

laws in respect to canned foods, it developed that unless every state did so the evils could not be removed. The National Association will at next session ask Congress to pass a national law, which, in connection with the use of the "Association Seal" and a liberal education of the public through the papers, it is thought will make it possible for any one of ordinary intelligence to get just what is desired, by being guided by the label on the can. We are, therefore, fairly on the way to have the destroying element removed from this industry, and it will then be free to fulfil its mission of extending sectional blessings to all the earth and of assisting in the general improvement of mankind.

LORD PALMERSTON.

BY J. CASTELL HOPKINS.

DURING half a century Lord Palmerston held a high place in British public life and for thirty years controlled the foreign policy of his country in such a manner as to make himself the frequent arbiter and guiding influence in European struggles for liberty or constitutional development. His name became a potent force upon the Continent long before his personality had attracted popularity at home. But in the latter years of his life he wielded a personal power in Parliament and among the people greater than that of Bolingbroke, Chatham, or Pitt—a power which enabled him to compel the practical support of the Tory party and the adhesion of five sixths of the Liberals. "There are no more Pyrenees," exclaimed Louis XIV. upon a memorable occasion, and before he died Lord Palmerston was practically able to say that for him there were no more parties. He held in check the intense reforming energy of Gladstone and reduced to a minimum of influence the brilliant opposition of Disraeli. His immense popularity became a political phenomenon of marvelous proportions and one which held for years in a state of almost suspended animation the party passions and ambitions and energies of the British Parliament and public.

This power came to him in the main because of his virile English sentiment, his embodiment of English thought, principles, and prejudices, his acute comprehension of the slow-going English mind, and the final strength of English determination. He appealed often and successfully to that deep-seated pride of power which lies partially concealed at the root of the British character. Of such a nature was his famous declaration in the Pacifico debate: "As the Roman in days of old held himself free from indignity when he could say *Civis Romanus sum*, so also a British subject, in whatsoever land he may be, shall feel confident that the watchful eye and the strong arm of England will protect him against injustice and wrong." Nor were these mere empty words. At the risk of war and despite the possibilities of political displacement he carried the principle into practice, and never before nor since—even in these later days of vast imperial power—has the prestige of England stood higher than it did in the days of Palmerston's control of its foreign affairs.

Throughout his career Lord Palmerston had many personal advantages. Born in Westminster, England, in 1784, he inherited the environment of culture and social influence which comes naturally to a scion of the British aristocracy; a descendant of the Sir William Temple who still represents to the English race many of the splendors of the Elizabethan age; one who was connected by ties of blood with the historic Grenville family, the ducal line of Buckingham and Chandos, and the descendants of the illustrious Sheridan. Inheriting his Irish peerage at the age of eighteen, he early entered into possession of all the opportunities which might be commanded by a clever young nobleman, free from the

disadvantages which a compulsory seat in the House of Lords might have offered. Handsome in appearance and gay in manner, he won the social designation of "Cupid" in his younger days, and when he finally married, late in life (1839), the widowed Countess Cowper, he became a brother-in-law of Lord Melbourne and a connection of the influential families of Roden, Shaftesbury, Cowper, Lucan, and Bessborough. More than this, he won a wife who made her *salons* a great power in London and brought all the influence of social leadership to the aid of her husband's political advancement.

Entering the House of Commons in 1807 and holding a seat in that body until his death in 1865, Lord Palmerston almost immediately became a member of the government, though not of that inner circle which is called the cabinet. For twenty years—from 1809 to 1830, with a few months' exception—he held the position of secretary at war in the ministries of Perceval, Liverpool, Canning, Goderich, and Wellington. It was a great and eventful period, and a most responsible administrative post which Lord Palmerston was thus selected to fill at the age of twenty-five. When he commenced his career of statecraft nearly all Europe was at the feet of Napoleon. Holland, Italy, Spain, Bavaria, Austria, Prussia, Hanover were in the power of the great usurper, and only upon the seas did the union jack wave in triumph. Sweden, Portugal, and Denmark were threatened, while at Tilsit the Russian autocrat had apparently joined the French conqueror in a partition of Europe. To a great extent the succeeding history of the Peninsular War and the final overthrow of France is a history of Palmerston's administration of the War Department. Of that period little more need be said than that he rendered to Wellington and other commanders the services which in an earlier time Chatham had given to Amherst, Clive, and Wolfe.

Those, however, were not the days of newspaper fame, and Palmerston took but little part in parliamentary debates. Hence it was that while he became known all over Europe and held his post through all the varied political changes of two decades, he was comparatively little known to the English masses. There was even much surprise felt when in 1830 Earl Grey appointed him to the Foreign Office in the great reforming administration. It was the commencement of the second period in Lord Palmerston's career. He had meanwhile drifted a long way in political matters from the days of his early Toryism to those in which he was able to accept office under Grey. But it had been a very natural process. His heart was wrapped up in foreign affairs. He seems to have cared nothing for home politics, and in all the five Tory governments in which he held a place Palmerston never publicly defended the repressive measures which were deemed necessary from time to time, though of course he held his share of official responsibility. On the other hand, he had always supported Catholic emancipation and the abolition of the slave trade. Abstention from public speaking was possible in those days for a statesman, and it may be that some natural foresight prevented him from pressing himself to the front in defense of measures which may have been necessary in days of storm without and stress within, but were none the less bound to be unpopular with the masses. He certainly avoided any more responsibility than he could help, refused a seat in the cabinet under the Duke of Portland, and declined the leadership of the House of Commons under Lord Goderich, when Mr. Canning's death took place in 1827.

But the great compelling force of his early life is to be found in the example and policy of Canning. That brilliant statesman combined a passionate love for liberty abroad with the feeling that the constitution at home was almost free enough; that any changes required in the British system could come gradually, and were not greatly needed at present—with the exception of Catholic emancipation; that the great mission of England was to crush tyranny in Europe and develop by every means in her

power free institutions and peoples all over the world. Add to these principles a passionate desire for the promotion of English power and influence and we have the elements which entered most largely into Lord Palmerston's heart and life; which caused his indifference to mere party lines and distinctions; which made him averse in early days to parliamentary speaking; which caused him by steady and natural gradation to pass from the inner circle of Wellington to the confidence of the reform leaders of 1830. While Canning lived his political history is that of his devoted follower; when he died his views continued to permeate the latter's policy and to maintain the Canningite party for many years in a position very similar to that of the Peelites of a later period. The small but potent party included William Huskisson, Lord Goderich, Lord Melbourne, Lord Palmerston, Charles Grant, afterward Lord Glenelg — eleven peers and twenty commoners all told.

Palmerston first assumed control of the Foreign Office with the determination of cultivating a French alliance. And in spite of many difficulties he succeeded in the main in this policy—the chief exceptions being in the Belgian question and the Egyptian embroglio of 1839. The former case illustrates his policy of straightforward firmness and almost rough frankness. The French government wanted to have the Duc de Nemours selected as king of the Belgians, and this was believed by Palmerston to mean a practical and certainly ultimate annexation of the new kingdom to France. Writing on February 15, 1831, instructions to Lord Granville at Paris concerning his demeanor toward the French minister of foreign affairs, he says: "Pray take care in all your conversation with Sebastiani to make him understand that our desire for peace will never lead us to submit to affront either in language or in act." On August 13 he writes still more vigorously:

> Will the French government withdraw their troops into France as soon as the Dutch have evacuated Belgium? Pray make them comprehend all that hangs upon that decision. Grey writes to you. He is peremptory on this point; and even if the cabinet had the slightest wish to give way upon it—which they have not—public opinion in England would prevent them. It is, then, a question of war or peace.

Eventually Lord Palmerston's forceful diplomacy won complete freedom for Belgium, both from Dutch rule and French dominance. In Poland he refused to intervene except by diplomatic suggestions, which were of course useless without the knowledge that force would be employed. He defended this policy of non-intervention upon lines not dissimilar to Lord Salisbury's explanation of his Armenian policy or his own subsequent reasons for refusing to help Denmark in its Schleswig-Holstein troubles. He did not believe that it was England's duty to fight several great powers in defense of small peoples for whom she felt sympathy but in whose condition she had no practical interest. He was preeminently a practical statesman. When all European liberties were threatened, as in the days of Napoleon, he would join in their defense to the uttermost of England's strength. When Belgian or Spanish or Portuguese liberty could be developed or preserved, even at the expense of a possible struggle with some single nation such as France, he was willing to encounter the risk. But to face a coalition of Russia, Austria, and Prussia in sentimental defense of Poland, he would no more undertake than would Lord Salisbury a contest with Russia, France, and Germany for the defense of the unfortunate Armenians. In this line of action he embodied the combined common sense and sturdy determination of the English people —the feeling which makes them hesitate long before entering upon a great struggle, but once plunged into it prevents them from ever recognizing defeat or giving way to difficulties.

When constitutional government was established in Spain and Portugal in the early thirties, Lord Palmerston gave strong practical support to the new institutions, against the external machinations of the Holy Alliance which had been formed by Russia, Prussia, and Austria, and the

internal efforts of Don Miguel in Portugal and Don Carlos in Spain, to reestablish despotic government. He was always very proud of the Quadruple Alliance of England, France, Spain, and Portugal, which he organized in the spring of 1834 for the preservation and advancement of liberal principles in Europe and which acted as an effective counterpoise to the plots of the three great despotisms. In the same way he had enthusiastically supported Canning in warning off the Holy Alliance from interference in South America when Spain was endeavoring to maintain despotic rule in those struggling communities, and had helped to bring the United States forward in a policy which has since become famed as the Monroe Doctrine—under other conditions and with very different application and principles.

For Greece Palmerston did much. Though a thorough believer in the necessity which existed then and thereafter for preserving the integrity and independence of Turkey—a euphemism for the protection of British interests in the East against the advance and domination of Russia — he never hesitated to strip the sultan of territory which might be erected into states possessing a measure of stability and freedom. Hence his early difference at home with Wellington and the high Tories of the time, and abroad with Russia, in connection with the establishment of free institutions and extended territories in Greece after her long and bitter struggle. As in later days in Servia and Bulgaria, Russia wanted to create a small and feeble kingdom dependent upon the government of the czar. Palmerston finally compelled and obtained the extension of her boundaries so as to make external independence possible together with the establishment of institutions which made internal liberty practicable. In 1839 Mehemet Ali, a bold and brilliant adventurer, had captured the government of Egypt, overrun Syria with his forces, and threatened to capture Constantinople. Under the terms of the treaty of Unkiar-Skelessi, Russia was preparing to pour her troops into Turkey for the protection of the capital, while France, for purposes of her own, was supporting Mehemet Ali. Out of this tangled web of danger and difficulty Palmerston, by a boldness which did not shrink from military intervention and the driving of the Egyptians out of Syria, brought about the retirement of Mehemet Ali into Egypt and a nominal alliance of the great powers for the protection of Turkey. One of his despatches to Sir Henry Bulwer at Paris illustrates the attitude he sometimes assumed in this critical period:

> If Thiers again holds to you the language of menace, however indistinctly and vaguely shadowed out, pray retort upon him to the full extent of what he may say to you, and convey to him in the most friendly and inoffensive manner possible that, if France throws down the gauntlet, we shall not refuse to pick it up; and that if she begins a war she will to a certainty lose her ships, colonies, and commerce before she sees the end of it; that her army of Algiers will cease to give her anxiety, and that Mehemet Ali will be just chucked into the Nile.

In 1833 Lord Melbourne became head of a reconstructed Whig ministry and Palmerston remained at the Foreign Office during the few months of its existence. From 1835 to 1841 he was again foreign secretary in Melbourne's second administration. In Lord John Russell's ministry—1846–52—he again held the same position and had to deal with the Spanish marriage question and to compel Louis Philippe to retire from his ambitious dynastic schemes in the peninsula. Again, as in 1830, he had to handle the complex conditions resulting from European revolutions, and it was well for England that in 1848–49, when despotic thrones were everywhere falling in the dust, she had a minister who was anxious to help the cause of liberty abroad but not willing to endanger English interests in quixotic enterprises. Occasionally in this period Palmerston was rash, often he was overbearing in manner, sometimes he was dictatorial in policy, but none the less his plans were, upon the whole, wise and far-seeing. An illustration of the latter fact is seen in his refusal to go to war with Russia and Austria for the independence of Hungary. It was an occasion for sentimental statesmanship, but one of which he did

not avail himself. Later on it was clearly seen that England would not have supported such a policy, although there was some localized enthusiasm. Not even the picturesque eloquence of Kossuth could arouse any really national feeling in the matter. What was practicable Lord Palmerston did do, and when Austria, backed by Russia, demanded the extradition and surrender of the Hungarian refugees in Turkey, Lord Palmerston impelled the Porte to refuse, and sent the British fleet to Besika Bay to enforce his dictum. The Austro-Russian demand was withdrawn and the patriots saved.

An illustration of his rashness is, on the other hand, found in the hasty recognition of Napoleon III. in 1851, and his own subsequent dismissal from office. At the time this was supposed to have been because of cabinet differences in the matter; now it is known to have been caused by Lord Palmerston's unwillingness to submit his despatches to the queen before sending them out—as other ministers have done before and since. The publication of the queen's personal memoranda defining the foreign secretary's duties to herself was a revelation to the public of the part she had taken and intended to take in public government. The dismissal was salutary in more ways than one, and though it was not long before he was in office again, his policy thereafter showed distinctly greater consideration toward foreign governments without any change in principle or practical policy.

Through the Crimean War Palmerston held the post of home secretary, and though indirectly responsible for its conduct, he was known to have always favored aggressive and active measures. Out from the broken reputations of the period he came unscathed until the wish for him to take the helm assumed large popular proportions. The Aberdeen ministry finally resigned on January 29, 1855, and Lord Palmerston, at the age of seventy, became prime minister. He finished the war and held office for three years; but troubles growing out of the attempted assassination of Louis Napoleon led to his resignation in February, 1858. In June, 1859, he again formed a ministry and wielded almost supreme power until his death six years later. During this period his government had to deal with the Austro-Italian War, and here again he did what was possible to advance the principles of liberty among the struggling states of Italy. Though no longer foreign minister, he was none the less the master mind of his cabinet, as he had always endeavored to be in his department. He had effected during his previous career many commercial treaties with European countries, and these he finally crowned with the French treaty of 1860.

Of his policy toward the United States it is impossible to speak here at length. His recently published correspondence shows him to have personally sympathized with the South, as did most of the English statesmen of the day, excepting Bright and Disraeli. But despite the tremendous internal pressure of the cotton interests suffering from the cotton famine of 1862–63, and external pressure from Napoleon III., he refrained from active intervention—partly through caution and partly through the strongly and frequently exerted influence of the queen. On October 18, 1865, he passed away. The most popular Englishman of the time, the "father" of the House of Commons, the best known statesman in Europe, the Bismarck of modern British diplomacy, Lord Palmerston left a great name and reputation. The chancelleries of the Continent remember it to this day in much the same manner as they do that of Pitt and Canning, and, in more recent days, that of Beaconsfield. In the statute books of England, the pages of Parliament, the reforming and changing legislation of a free people, he holds a lesser place. But he chose his sphere of achievement well and in it attained a lofty place.

He never pushed himself forward. In 1827 the splendid Indian vice-royalty was his, and a little later the leadership of the House of Commons. Both were refused. Ambitious without vanity, he advanced slowly but surely up the ladder of fame. Loyal to his friends and generous and

affectionate in disposition, he was also personally frank to the verge of indiscretion, independent in foreign policy to the verge of rudeness, quick in comprehension and action to the verge of rashness. But always and everywhere he loved his country and strove to maintain its honor and extend its interests. In later years his qualities mellowed down into a combination of patriotism and kindliness which won support from all classes and sections of the people, and made them feel that in his death they had lost not only a great Englishman but a personal friend.

TRUE GREATNESS.

He shall be great in the sight of the Lord.
—*Luke i. 15.*

SO spake the angel who foretold the birth of John the Baptist. "In the sight of the Lord"—then men are not on a dead level in his eyes. Though he is so high and we are so low, the country beneath him that he looks down upon is not flattened to him, as it is to us from an elevation, but there are greater and smaller men in his sight, too. No epithet is more misused and misapplied than that of "a great man." It is flung about indiscriminately, as ribbons and orders are by some petty state. Every little man that makes a noise for a while gets it hung round his neck. Think what a set they are that are gathered in the world's Valhalla, and honored as the world's great men! The mass of people are so much on a level, and that level is so low, that an inch above the average looks gigantic. But the tallest blade of grass gets mown down by the scythe and withers as quickly as the rest of its green companions, and goes its way into the oven as surely. There is the world's false estimate of greatness and there is God's estimate. If we want to know what the elements of true greatness are, we may well turn to the life of this man, of whom the prophecy went before him that he should be "great in the sight of the Lord." That is gold that will stand the test.

We may remember, too, that Jesus Christ, looking back on the career to which the angel was looking forward, indorsed the prophecy and declared that it had become a fact, and that "of them that were born of women there had not arisen a greater than John the Baptist." With the illumination of his eulogium we may turn to this life, then, and gather some lessons for our own guidance.

I. First, we note in John unwavering and immovable firmness and courage.

"What went ye out into the wilderness for to see? A reed shaken with the wind?" Nay! an iron pillar that stood firm whatsoever winds blew against it. This, as I take it, is in some true sense the basis of all moral greatness—that a man should have a grip which cannot be loosened, like that of the cuttle-fish with all its tentacles round its prey, upon the truths that dominate his being and make him a hero. "If you want me to weep," said the old artist-poet, "there must be tears in your own eyes." If you want me to believe, you yourself must be aflame with conviction which has penetrated to the very marrow of your bones. And so, as I take it, the first requisite either for power upon others, or for greatness in a man's own development of character, is that there shall be this unwavering firmness of grasp of clearly-apprehended truths, and unflinching boldness of devotion to them.

I need not remind you how magnificently, all through the life of our typical example, this quality was stamped upon every utterance and every act. It reached its climax, no doubt, in his bearding Herod and Herodias. But moral characteristics do not reach a climax unless there has been much underground building to bear the lofty pinnacle; and no man, when great occasions come to him, develops a courage

and an unwavering confidence which are strange to his habitual life. There must be the underground building; and there must have been many a fighting down of fears, many a curbing of tremors, many a rebuke of hesitations and doubts in the gaunt, desert-loving prophet, before he was man enough to stand before Herod and say, "It is not lawful for thee to have her."

No doubt there is much to be laid to the account of temperament, but whatever their temperament may be, the way to this unwavering courage and firm, clear ring of indubitable certainty is open to every Christian man and woman; and it is their own fault, their own sin, and their own weakness, if they do not possess these qualities. Temperament! What on earth is the good of our religion if it is not to modify and govern our temperament? Has a man a right to jib on one side and give up the attempt to clear the fence because he feels that in his own natural disposition there is little power to take the leap? Surely not. Jesus Christ came here for the very purpose of making our weakness strong, and if we have a firm hold upon him, then, in the measure in which his love has permeated our whole nature, will be our unwavering courage, and out of weakness we shall be made strong.

Of course the highest type of this undaunted boldness and unwavering firmness of conviction is not in John and his like. He presented strength in a lower form than did the Master from whom his strength came. The willow has a beauty as well as the oak. Firmness is not obstinacy; courage is not rudeness. It is possible to have the iron hand in the velvet glove, not of etiquette-observing politeness, but of a true considerateness and gentleness. They who are likest him that was "meek and lowly in heart" are surest to possess the unflinching resolve which set his face like a flint and enabled him to go unhesitatingly and unrecalcitrant to the cross itself.

Do not let us forget, either, that John's unwavering firmness wavered; that over the clear heaven of his convictions there *did* steal a cloud; that he from whom no violence could wrench his faith felt it slipping out of his grasp when his muscles were relaxed in the dungeon; and that he sent "from the prison"—which was the excuse for the message—to ask the question, After all, *art* thou he that should come?

Nor let us forget that it was that very moment of tremulousness which Jesus Christ seized, in order to pour an unstinted flood of praise for the firmness of his convictions on the wavering head of the forerunner. So, if we feel that though the needle of our compass points true to the pole, yet, when the compass-frame is shaken, the needle sometimes vibrates away from its true direction, do not let us be cast down, but believe that a merciful allowance is made for human weakness. This man was great; first, because he had such dauntless courage and firmness that over his headless corpse in the dungeon at Machærus might have been spoken what the Regent Murray said over John Knox's coffin, "Here lies one that never feared the face of man."

II. Another element of true greatness that comes nobly out in the life with which I am dealing is its clear elevation above worldly good.

That was the second point that our Lord's eulogium signalized. "What went ye out into the wilderness for to see? A man clothed in soft raiment?" But you would have gone to a palace if you had wanted to see that, not to the reed-beds of Jordan. As we all know, in his life, in his dress, in his food, in the aims that he set before him, he rose high above all regard for the debasing and perishable sweetnesses that appeal to flesh and are ended in time. He lived conspicuously for the unseen. His asceticism belonged to his age, and was not the highest type of the virtue which it expressed. As I have said about his courage, so I say about his self-denial—Christ's is of a higher sort. As the might of gentleness is greater than the might of such strength as John's so the asceticism of John is lower than the self-government of the Man that came eating and drinking.

But whilst that is true, I seek, dear brethren, to urge this old threadbare lesson

always needed, never needed more than amidst the senselessly luxurious habits of this generation, that one indispensable element of true greatness and elevation of character is that, not the prophet and the preacher alone, but every one of us should live high above these temptations of gross and perishable joys, should

Scorn delights and live laborious days.

No man has a right to be called "great" if his aims are small. And the question is, not as modern idolatry of intellect, or, still worse, modern idolatry of success, often makes it out to be, has he great capacities? or has he won great prizes? but, has he greatly used himself and his life? If your aims are small you will never be great; and if your highest aims are but to get a good slice of this world's pudding—no matter what powers God may have given you to use—you are essentially a small man.

I remember a vigorous and contemptuous illustration of St. Bernard's, who likens a man that lives for these perishable delights which John spurned to a spider spinning a web out of his own substance and catching in it nothing but a wretched prey of poor little flies. Such a one has surely no right to be called a great man. Our aims rather than our capacity determine our character, and they who greatly aspire after the greatest things within the reach of men, which are faith, hope, charity, and who, for the sake of effecting these aspirations, put their heels upon the head of the serpent and suppress the animal in their nature, these are the men "great in the sight of the Lord."

III. Another element of true greatness, taught us by our type, is fiery enthusiasm for righteousness.

You may think that that has little to do with greatness. I believe it has everything to do with it, and that the difference between men is very largely to be found here, whether they flame up into the white heat of enthusiasm for the things that are right, or whether the only things that can kindle them into anything like earnestness and emotion are the poor, shabby things of personal advantage. I need not remind you how, all through John's career, there burnt unflickering and undying that steadfast light; how he brought to the service of the plainest teaching of morality a fever of passion and of zeal almost unexampled and magnificent. I need not remind you how Jesus Christ himself laid his hand upon this characteristic when he said of him that "he was a light kindled and shining." But I would lay upon all our hearts the plain, practical lesson that, if we keep in that tepid region of lukewarmness which is the utmost approach to tropical heat that moral and religious questions are capable of raising in many of us, good-by to all chance of being "great in the sight of the Lord." We hear a great deal about the "blessings of moderation," the "dangers of fanaticism," and the like. I venture to think that the last thing which the moral consciousness of the world wants to-day is a refrigerator, and that what it needs a great deal more than this is, that all Christian people should be brought face to face with this plain truth—that their religion has, as an indispensable part of it, "a spirit of burning," and that if they have not been baptized in fire there is little reason to believe that they have been baptized with the Holy Ghost.

I long that you and myself may be aflame for goodness, may be enthusiastic over plain morality, and may show that we are so by our daily life, by our rebuking the opposite, if need be, even if it took us into Herod's chamber and made Herodias our enemy for life.

IV. Lastly, observe the final element of greatness in this man—absolute humility of self-abnegation before Jesus Christ.

There is nothing that I know in biography anywhere more beautiful, more striking, than the contrast between the two halves of the character and demeanor of the Baptist; how, on the one side, he fronts all men undaunted and recognizes no superior, and how neither threats nor flatteries nor anything else will tempt him to step one inch beyond the limitations of which he is aware, nor to abate one inch of the claims which he urges; and, on the other hand, like some tall cedar, touched by

lightning's hand, he falls prone before Jesus Christ and says, "He must increase, and I must decrease"; "a man can receive nothing except it be given him of God." He is all boldness on one side; all submission and dependence on the other.

You remember how, in the face of many temptations, that attitude was maintained. The very message which he had to carry was full of temptations to a self-seeking man to assert himself. You remember the almost rough "No!" with which, reiteratedly, he met the suggestions of the deputation from Jerusalem, that sought to induce him to say that he was more than he knew himself to be, and how he stuck by that infinitely humble and beautiful saying, "I am a voice"—that is all. You remember how the whole nation was in a kind of conspiracy to tempt him to assert himself, and was ready to break into a flame if he had dropped a spark, for "all men were musing in their heart whether he was the Christ or not," and all the lawless and restless elements would have been only too glad to gather round him if he had declared himself the Messiah. Remember how his own disciples came to him and tried to play upon his jealousy and to induce him to assert himself: "Master, he whom thou didst baptize"—and so didst give him the first credentials that sent him on his course —"has outstripped thee," and "all men are coming to him." And you remember the lovely answer that opened such depths of unexpected tenderness in the rough nature: "He that hath the bride is the bridegroom: the friend of the bridegroom heareth the voice; and that is enough to fill my cup with joy to the very brim."

And what conceptions of Jesus Christ had John, that he thus bowed his lofty crest before him and softened his heart in submission almost abject? He knew him to be the coming Judge, with the fan in his hand, who could baptize with fire, and he knew him to be "the Lamb of God which taketh away the sin of the world." Therefore he fell before him.

Brethren, we shall not be "great in the sight of the Lord" unless we copy that example of utter self-abnegation before Jesus Christ. Thomas à Kempis says somewhere, "He is truly great who is small in his own sight and thinks nothing of the giddy heights of worldly honor." You and I know far more of Jesus Christ than John the Baptist did. Do we bow ourselves before him as he did? The Source from which he drew his greatness is open to us all.

Let us begin with the recognition of the Lamb of God that takes away the world's sin, and with it ours. Let the thought of what he is and what he has done for us bow us in unfeigned submission. Let it shatter all dreams of our own importance or our own desert. The vision of the Lamb of God, and it only, will crush in our hearts the serpent's eggs of self-esteem and self-regard.

Then, let our closeness to Jesus Christ and our experience of his power kindle in us the fiery enthusiasm with which he baptizes all his true servants, and let it, because we know the sweetnesses that excel, deprive us of all liability to be tempted away by the vulgar and coarse delights of earth and of sense. Let us keep ourselves clear of the babble that is round about us, and be strong because we grasp Christ's hand.

I have been speaking about no characteristic which may not be attained by any man, woman, or child among us. "The least in the kingdom of heaven" may be greater than John. It is poor ambition to seek to be *called* "great." It is a noble desire to *be* "great in the sight of the Lord." And if we will keep ourselves close to Jesus Christ that will be attained. It will matter very little what men think of us if at last we have praise from the lips of him who poured such praise on his servant. We may, if we will. And then it will not hurt us though our names on earth be dark and our memories perish from among men.

"Of so much fame in heaven expect the meed."—*Alexander Maclaren, D.D.*

THE CHEMISTRY OF TO-DAY.

BY L. H. BATCHELDER, A.M.

PROFESSOR OF PHYSICAL SCIENCE IN HAMLINE UNIVERSITY.

"What's come to perfection perishes."

THIS line, standing at the end of Prof. Pattison Muir's "Principles of Chemistry," is indicative of the condition and ambition of the chemistry of to-day. Chemistry is by no means a completed science, vast as have been her conquests, brilliant as have been her achievements, during the short period which has elapsed since she could fairly claim an independent position. New problems present themselves for solution with each succeeding advance toward an ever-receding goal; nor would the true scientist have it otherwise. For "What's come to perfection perishes" is true of all things finite.

It will be at once recognized that the real end of the chemist's research is not the discovery nor manufacture of new compounds, nor even the discovery of new elements, though the importance of such discoveries and the brilliancy which often attends their announcement are liable to produce this impression. The profound impression produced by the announcement of the discovery by Lord Rayleigh and Professor Ramsay of argon, later of terrestrial helium by Professor Ramsay and still more recently by the discovery of other elements in the atmosphere by the same brilliant chemist, will be readily recalled as cases in point. Such discoveries are elementary steps, quite necessary in building up the science, just as a practical knowledge of many elements and compounds must be acquired by the novitiate in chemistry.

From the accumulated material of the chemist's researches have been derived many general truths. It was when these truths began to be understood that the science of chemistry was born. Upon the general truths already amassed and others which remain to be discovered, chemistry hopes yet to found a general theory of chemical change—a theory which shall account for every chemical change and express the law governing such changes in terms, perhaps, of a single, simple, mathematical equation. Such is the goal of the chemical science of to-day, a goal which she must reach, if at all, through the patient and protracted labors of her many single-hearted devotees.

When a half century, or less, ago chemistry had incorporated as central laws the conclusions of Lavoisier, of Dalton, and of Gay-Lussac, and finally had accepted Avogadro's prematurely announced hypothesis, she had at last laid a foundation of clearly apprehended scientific truth. It was possible for Newton to lay the foundation of the law of external visible movement only after the preparatory work of Copernicus and Kepler. Though chemistry has waited long since Lavoisier, Dalton, Gay-Lussac, and Avogadro, and must still wait while she makes ready for his coming, perhaps a Newton may yet appear as the founder of a chemical mechanics of the molecular world.

Some of the general laws by the aid of which chemistry has reached its present position, and which have become, or seem destined to become, central in the science will be here briefly discussed, for the purpose of illustrating the methods and material of modern chemistry, and of suggesting the trend of thought and endeavor among modern chemists.

The hypothesis of Avogadro, announced, as it will be remembered, in 1811 and left neglected for nearly forty years till Laurent and Gerhardt called it back to life and made it the corner-stone of the new chemistry, is now expressed thus: "Equal volumes of all gases and vapors at equal temperatures and pressures contain an

equal number of molecules." This hypothesis is the basis of contemporary conceptions both mechanical and chemical. The consequences arising from it have been verified by the most widely diverse methods, and now, when all efforts to disprove these consequences have been found futile, it must be considered verified. A mere hypothesis in the first instance, it has passed the stage of a theory, and is now accepted by physicist and chemist alike as a law.

It should be remembered that all laws of natural phenomena are at first hypotheses. Some are rapidly established by the exact and evident agreement of their consequences with the facts; others only by slow degrees, when the agreement of their consequences with the facts is only made apparent by profound research and careful analysis. Newton's law of gravitation was, at first, only an hypothesis, but it became a theory, and, finally, a fundamental law through the exact agreement of its consequences with the facts of nature.

The first and most obvious deduction from the physical aspect of this law, and one of the utmost importance, is that the weights of all gaseous molecules bear the same relation to each other as the specific gravity of the gases themselves. Hence, when this is ascertained the relative weights of their molecules are known.

We turn now to the chemical aspect of this law and consider the simple case of two volumes of chlorine and two volumes of hydrogen which combine to form four volumes of hydrogen chloride or hydrochloric acid. Each molecule of hydrogen by combination with one molecule of chlorine produces, not one, but two, molecules of hydrochloric acid. In this case it becomes evident that the molecules of hydrogen and chlorine each split into at least two parts. Hence H_2 and Cl_2 may be used to represent a molecule of each of these elements. The atomic weight of hydrogen is taken as unity. Hence the molecule of hydrogen weighs two. The molecular weight of any gas is, therefore, equal to twice its density compared with hydrogen.

But it may be urged that when the hydrogen and chlorine molecules break up to unite in hydrochloric acid, they do so in more than two parts, as four, for example; so that the new molecule would contain two atoms of hydrogen and two of chlorine, and its symbol would then be $H_2 Cl_2$, instead of HCl. If this were so, it ought to be possible to remove the hydrogen or chlorine from a molecule of hydrochloric acid in two separate portions, but no such interaction occurs. Therefore it is extremely improbable that the molecule is built up of more than one single elementary, indivisible part or atom of each of the elements that compose it. This law enables the chemist to determine the molecular weight of all gaseous substances, and the atomic weight of the elements which compose or enter into such gases. Many complex and difficultly explainable cases arise, but the law in the final analysis is found to be in rigid agreement with the facts. Maximum atomic weights of about two thirds of the known elements have now been determined by the application of Avogadro's law.

By analogous reasoning Clerk Maxwell and others have deduced from this theory generalizations of experimentally determined facts concerning gaseous phenomena. The molecular theory gives a simple explanation of the diffusion of matter, diffusion of motion, and diffusion of heat in gases. This theory, too, has been employed to explain phenomena of evaporation, condensation, electrolysis, and spectroscopy. Interesting attempts have been made to ascertain the actual size of molecules; while the results can only be regarded as rough approximations, they are at least legitimate deductions. According to Sir William Thompson, "The smallest portion of matter visible by the help of a good microscope may be taken to be a cube, each side of which measures about $\frac{1}{100{,}000}$ of an inch. Such a cube will contain from sixty to one hundred millions of molecules."

But it is to be observed that this law can only be directly applied to determine the molecular weight of substances which are either gaseous at ordinary temperatures, or are capable of being rendered gaseous at

temperatures that will permit their examination. For other cases, however, several other methods are available, among which the most interesting and the most important are based upon the theory of solutions. In 1885 Van't Hoff brought forward his theory of solutions based on certain previously observed phenomena, a theory which was rapidly developed and is proving itself eminently fruitful in the hands of such chemists and splendid investigators as Van't Hoff, Raoult, Arrhenius, and Ostwald. It has long been known that if a water solution of a crystalloid substance be placed in a vessel and closed by a porous membrane, such as parchment, and the whole immersed in pure water, that the dissolved substance will gradually pass outward through the film, while the water passes inward until the liquid has the same composition within and without the porous cell. This process is called "osmose." Rigid diaphragms of other substances have been made, however, which allow the water to pass freely in the same way as through the parchment, but prevent the outward passage of the dissolved substance.

If a cell made of such a substance, containing a dilute solution of sugar, for example, be placed in a vessel of pure water, the water is found to pass inward through the cell walls, while the sugar does not pass out, and consequently the liquid within the cell rises. Let now the cell be completely filled and connected with an instrument for measuring the pressure; it will be found that the pressure gradually increases until finally it becomes constant. This pressure is called the "osmotic pressure." Osmotic pressure may be simply and beautifully illustrated thus: Let a fresh egg, with a piece of the shell about the size of a dime broken away without rupturing the membrane, be placed in pure water. The water will flow inward while the contents of the egg flow outward very slowly, or not at all, until after a time the expansive force produced by the osmotic pressure will rupture the membrane. This pressure is found to depend only on (1) the nature of the dissolved substance, (2) the concentration of the solution, and (3) the temperature; hence the following law of Van't Hoff: "Dissolved substances exert the same pressure in the form of osmotic pressure as they would exert were they gasified at the same temperature without change of volume."

We may therefore carry over to solutions all we know to hold good for the properties of gases, as they depend on pressure, volume, and temperature, provided we use osmotic pressure for ordinary gaseous pressure. Accordingly osmotic pressure plays the same part in the theory of dilute solutions as gaseous pressure in that of gases, and is found to follow the same laws. Thus, doubling the strength of a solution doubles the osmotic pressure, just as, according to Boyle's law, doubling the pressure halves the volume, that is, doubles the density of the gas. This law means also that solutions whose percentage of the dissolved substances is in proportion to the molecular weights of these substances produce the same osmotic pressure. For example, suppose two substances, A and B, have molecular weights represented by one hundred and two hundred, one gram of A dissolved in a certain volume of water will produce the same osmotic pressure as two grams of B dissolved in an equal volume of water. It follows that the molecular weight of a dissolved substance can be determined by measuring its osmotic pressure and employing a simple equation expressing this relation.

Another method based on the theory of solutions has come into more general use, having fewer experimental difficulties. In 1885 Raoult published the result of a series of researches summed up in the law: "One molecule of any compound, when dissolved in 100 molecules of a liquid, lowers the solidification point by an amount which is nearly constant, viz.: $\frac{62}{100}$° C." A moment's consideration will make it clear that a given number of molecules of every soluble substance, when dissolved in a constant quantity of the same suitable solvent, will produce the same depression of the freezing point. This is expressed in the above law. Raoult's results were at first little noticed,

partly, perhaps, because, though sufficiently verified, they were purely empirical statements. But in 1888 Van't Hoff, by theoretical considerations, showed that these statements were necessary consequences of more general laws. He also brought forward a modified and corrected form of Raoult's equation for applying this law to the determination of molecular weights. Under the leadership of Ostwald the laws of solutions have, during the last ten years, been thoroughly investigated. These laws are capable of very wide application, as nearly every known substance is soluble in some liquid. The laws of osmotic pressure, of the depression of the freezing point, as also of diminution of vapor pressure—not here discussed—are intimately connected with one another both experimentally and theoretically, so that if one of the facts about a solution be known the others can be calculated.

Professor Ostwald, in concluding his work on "Solutions," says, "The discovery of the laws of solutions is full of significance for the advancement of physical chemistry; for these laws are important helps in the investigation of the next problem, which is the laws of pure liquids." The genius of chemistry is here speaking. Every general law established is a vantage ground for the next advance toward a general theory for chemical change.

Thirty years ago Mendeléeff first plainly called attention to certain relationships among the elements. These relationships have since been formulated into a law which has proved itself exceedingly suggestive and fruitful. Only a few fundamental types exist for the building up of atoms into molecules, and most of these have now been discovered. Examples of these types are: hydrochloric acid, water, ammonia, and marsh gas, with the atoms in the molecules united, one to one, one to two, one to three, and one to four, respectively. On one or the other of these familiar types is built the greater number of known compounds. The regularity and simplicity which govern the formation and properties of all the compounds of the elements are here illustrated. Analogous elements form analogous compounds, though these elements may differ from each other in certain of their properties.

Now what are the properties of these elements which will allow actual comparison and measurements? "Their atomic weights," answered Mendeléeff. According to all our physico-chemical data, the mass of a substance is that property on which all the remaining properties must be dependent. This idea led to arranging all the elements according to their atomic weights. When so arranged, a periodic repetition of properties is observed. The properties of the elements, as well as the forms and properties of their compounds, form, to put it algebraically, a periodic function of the atomic weight of the elements. The acceptance of this doctrine, that the properties of atoms form a function of their weight, is uprooting many of the older conceptions of atoms as independent individuals with properties determined by their individual natures. Many chemical deductions thus acquire a new significance, and a regularity is observed which would otherwise fail to appear; for example, it has been possible to foretell the properties of undiscovered elements which should appear in vacant places in the table of elements arranged according to their atomic weights. In three instances this has actually been done. The predicted elements, when discovered, were found to have atomic weights and properties corresponding very exactly with those which had been prognosticated for them. Professor Ramsay, in a recent article concerning the atomic weight of helium, suggests the existence of a third gas, yet undiscovered, to fill a vacant place in the series, between helium and argon. Chemists believe that classification by the atomic weights will form a foundation for a theory of chemical affinity, of the real nature of which we now know nothing; a theory which will lead to the establishment of a system of inorganic chemistry, corresponding to the more complete system we already have for organic compounds.

ENGLISH COLONIZATION IN THE OLD WORLD.

BY EUGENE PARSONS.

SAYS Professor Bryce: "More by a series of what may be called historical accidents than from any deliberate purpose, Britain has acquired vast transmarine possessions." This is peculiarly true of the British settlements and protectorates in Africa and the far East. The English have no possessions in North Africa. The sphere of their influence and dominion in the Dark Continent extends from Cape Verde on the west and the Gulf of Aden on the east to the Cape of Good Hope. England's scattered colonies and dependencies in this district have an area of more than 2,500,000 square miles and a population estimated from ten to forty millions. To Great Britain more than to any other nation belongs the credit of bringing this unknown land into contact with European civilization. British enterprise and capital have done much to develop its abundant resources. British traders, hunters, soldiers, and missionaries have traversed its wilds and sailed its rivers and lakes. Along with other blessings that England has brought to Africa, her share in suppressing the slave-trade should not be forgotten.

The British dependencies in West Africa, known as Gambia and the Gold Coast, were settled by an English trading company in 1618. This company was not "backed by the government." No permanent settlements were planted until long afterward. In the eighteenth century many Englishmen were engaged in the African slave-trade, an unholy traffic that blighted peace and industry long after its abolition (as far as Britain was concerned) in 1807. While the Dutch, the French, and the English had numerous forts and factories in West Africa, there were no colonies in the true sense before the British occupation of Sierra Leone (1787), which became a crown colony in 1808. In 1816 some English merchants established the colony of Bathurst in Gambia, which in time grew into an English dependency (1850). Settlements also were made in the territory of the Gold Coast, which became a crown colony and protectorate in 1850. In 1861 the island of Lagos, not far from the Gold Coast, was ceded to Great Britain. "It marked the formal beginning of a new ring of trade and settlement" eastward around the Niger River. Meanwhile the limits of the colonies of Sierra Leone, Gambia, and the Gold Coast were enlarged, their areas now being nearly 70,000 square miles.

Before the Ashantee war (1873–74) there had been a movement into the interior of Africa by British explorers and merchants, which resulted in the opening of the Niger. The way was now clear for the extension of commerce along this great watercourse, and the stream of traders poured inland. In 1879 the English firms doing business in this country united to form the National African Company for the further expansion of British interests in the parts known as the Niger territories. Later it was chartered as the Royal Niger Company, with powers not only to trade but to govern. In 1885 the British government proclaimed a protectorate over the lands of the Royal Niger Company and of the Niger coast (roughly estimated at 500,000 square miles or more). Part of the Lagos Hinterland (now called Nigeria) was ceded to Britain in June, 1898.

Some small islands in the South Atlantic are unimportant outposts of the British Empire: St. Helena (occupied in 1651), Ascension (annexed in 1815), and Tristan da Cunha (1816). Mention might be made here of the stronghold of Gibraltar won from Spain in 1704 and the island of Malta won from France in 1800—both the spoils of conquest.

Says Lucas:

The story of South Africa is unique in the chronicles of European colonization. For a century and

a half it is the barren record of a landmark—the cape. For another century and a half it is little more than the story of a port of call, round which a small settlement gathered. It is now the unfinished tale of a wide dominion.

In the seventeenth century the Cape of Good Hope was a convenient stopping-place for English ships on the way to India. However, the Dutch were the first to found a colony there, in 1652. The new Holland in Cape Town never amounted to much; it had a population of 10,000 in 1770. In 1806 it was lost to the Netherlands, being conquered by the English, and by the treaty of 1814 it became a dependency of Great Britain. The British have developed its resources and enlarged its borders, Kaffraria and other large tracts being annexed from time to time. English missionaries were the pioneers of civilization in this far-off region; the narrative of their labors is a bright page in its history.

Natal, on the southeast coast of Africa, got its name from Vasco da Gama, the Portuguese navigator, who, after doubling the cape, sighted land Christmas Day, 1497. It was never the theater of European colonization until 1824, when some adventurous traders from Cape Town landed at Port Natal and took possession of the country as British territory. Settlers were few, because of the unfriendly and bloodthirsty Zulus. Thither, too, came some of the Dutch *trekkus* from the Cape Colony (1836-40), looking for new homes and fighting their way with the treacherous natives. A Boer republic was set up in Natal, there being only a handful of Englishmen. Owing to difficulties with the savage tribes, the Boers were glad to have British protection, and Natal became an English colony in 1843. But love of independence led the Dutch farmers to wander away northward, where they founded the Orange Free State and the Transvaal Republic.

During the last three decades, that is, since the finding of diamonds and gold, South Africa has been revolutionized. The discovery of diamonds in 1867 brought a rush of diggers and capitalists into this land of uncivilized black men. Henceforth its growth was rapid, and one after another African district was added to the British Empire. Basutoland, bordering on Natal, was ceded to England in 1868, and Griqualand West (afterward incorporated into the Cape Colony) was annexed in 1871, its mineral wealth having suddenly attracted a legion of immigrants. Now began the English advance north into regions hitherto unoccupied by white men.

Meanwhile the Transvaal Republic had become a scene of lawlessness and bloodshed, and England intervened to stop the conflicts of miners, natives, and Boers. The restraining power of a strong government being needed to check the strife and confusion, the Transvaal was annexed in 1877 as British territory. The unlucky Zulu war followed in 1879. There was delay in granting the Boers a liberal constitution, most of their leaders were opposed on principle to English rule, and the result was the declaration of Boer independence, December 16, 1880. The South African Republic was formally recognized in 1884, and is still an independent nation. Jameson's ill-starred rising in 1895, as might have been expected, failed to overturn President Kruger's authority.

In 1882 and the following years the Boers settled in Zululand and became involved in the wars of the natives. British interests were at stake, and again it became the duty of the government to interfere in behalf of humanity (1884–86). Zululand was divided, a part becoming a crown colony and the remainder being absorbed in the South African Republic. In 1896 British protection was extended to Amatongaland, a small country north of Zululand.

Since 1884 there has been a scramble for what was left of Africa on the part of the European powers—France, Germany, Belgium, and Italy. England, as usual, obtained the lion's share. The wide stretch of country (more than 400,000 square miles) lying between Cape Colony and Victoria Falls is known as the South African plateau, elevated from 2,000 to 5,000 feet above the level of the sea. This is the land of the Bechuana tribes, now called the Bechuana-

land Protectorate. The Boers from the Transvaal, who occupied part of this country (1882–84), having got into trouble with the native chiefs, England was called upon to adjust matters. The Dutch marauders were driven out and a British protectorate proclaimed in 1885.

Matabeleland and Mashonaland, between the Transvaal and the Zambesi River, were formerly under the sway of King Lobengula. Unable to keep out hunters and gold-seekers from his dominions, the king appealed to the British government for protection, which was granted in 1888. The next year the British South Africa Company was organized, with Cecil J. Rhodes at the head, to promote trade, mining, and colonization in this country and also in the territory north of the Zambesi called Zambesia. Since the Matabele campaign in 1893 the way has been clear for the improvement of this extensive region named Rhodesia (some 600,000 square miles), now known as the protectorate of the South Africa Company.

The revered name of Livingstone will always be associated with the land of Central Africa under British control, west and south of Lake Nyassa. It was the seat of missionary effort and commercial activity on the part of Englishmen years before the treaty of 1891 between Great Britain and Portugal fixed the boundaries of the sphere of British influence. In 1893 this section, sometimes called Nyassaland (including 60,000 square miles), was named the British Central Africa Protectorate.

Until half a century ago East Africa was a sealed book to Europeans. Since then the explorations of Burton, Speke, Grant, Baker, Stanley, and other travelers have made the outlines of its geography familiar. By the terms of agreements made in 1886–95 between England and the continental powers, the British protectorates of East Africa include a territory of 1,000,000 square miles, lying south and west of Abyssinia. The English government reluctantly assumed the burden of administration over this immense province and the islands of Zanzibar and Pemba. The British protectorate over Uganda was proclaimed in 1894, and the protectorate of the adjacent districts was assumed in 1895–96.

English trade with India dates from the early part of the seventeenth century. The East India Company of London was chartered in 1600, and its fleets sailed to various points in the Orient, bringing back the wares and spices of Asia and the neighboring islands. It gained a foothold at Surat in 1611, and a few years later several English factories were established in the Indian Empire. The English factory at Armegon and one in Madras (built in 1640) were fortified and defended by garrisons. Afterward stations were planted at Bombay (1661), Fort St. David (1691), and Calcutta (1696). Such were the beginnings of the British possessions in Asia.

In these early times and later the English had the French and the Dutch as commercial rivals in the East. Under the circumstances trouble was sure to arise, and conflicting claims and ambitions led to fighting between the French and the English in India. Clive's famous victory at Plassey (1757) gave the English a tremendous influence in Indian affairs. It made the East India Company practically the master of Bengal, Orissa, and Bihar. There were other wars and victories, some of them hard-won, which brought England additional territory and prestige. "Half a century later," says Gretton, "at the end of the second Mahratta war in 1805, the English were paramount along the Ganges Valley from Delhi to Calcutta; while on the east coast their territory extended from Hooghly to Cape Comorin, and comprised the whole of Southern India." During the nineteenth century England has gained control over other parts of India: Scinde (1843); Punjab (1849); Oudh (1856); Burma (1824, 1852, 1885). British India now embraces a territory of about 1,000,000 square miles, with a population of about 230,000,000. There are other Indian provinces partly under British rule and protection, having a population ranging from seventy to ninety millions.

Great Britain has other possessions in Asia and in Asiatic waters. Aden, on the

southern coast of Arabia, was annexed in 1838, and the island of Perim in 1855. Cyprus was ceded in 1878 by treaty with the sultan. Since 1889 the greater part of Baluchistan, a mountainous country west of India, has been under British rule and protection by treaty with the khan.

Penang, of the Malay Indies, was ceded to England in 1786, and formed the nucleus of the Straits Settlements; the island of Singapore was secured by treaty in 1819, and Malacca in 1824. The protected states of British Malaya (Perak, Selangor, Negri Sembilan, Penang, and Johore) became a dependency of Great Britain in 1853, and a crown colony in 1867. The Cocos Islands were added in 1887, and Christmas Island in 1889.

The Seychelles archipelago in the Indian Ocean, now a dependency of Mauritius, was conquered in 1794; and Mauritius won from France in 1810. Ceylon was obtained by war from Holland in 1795. Hong-kong, near the coast of China, was ceded to England in 1841. The island of Labuan passed into British hands in 1846, and North Borneo in 1881. The Andaman Islands were occupied by the English in 1858, and the Nicobars in 1869. Other islands of Greater Britain in the East are Sokotra, the Laccadives, and the Kuria Maria group, all in the Arabian Sea; also the Bahrein Islands in the Persian Gulf.

When Captain Cook, on those memorable voyages of exploration in the South Seas, discovered another continent, England was in great measure compensated for the loss of her American colonies. The story of the settlement and growth of the Australian commonwealth is certainly one of the most romantic chapters in the records of modern colonization. In 1788 the British government established a convict settlement at Sydney, on the southwest coast. In 1815 a colony was founded in the interior of New South Wales, and later (1829–32) several settlements were made in West Australia, and one in South Australia (1836). The work of colonization went on slowly until 1851, when the discovery of gold suddenly increased the tide of emigration to these remote places. The population in 1850 was only 50,000; it is now more than 5,000,000. The Australian colonies have made astonishing progress, too, in civilization.

The new Britannia in the antipodes consists of innumerable islands, which have been received into the family of English colonies through pressure of circumstances rather than by any definite and wide-reaching imperial policy. Tasmania, south of Australia, was visited by Captain Cook in 1777 and settled in 1803. New Zealand, the largest of England's islands in tropical seas, was circumnavigated by Cook, who took possession in the name of Great Britain; it was ceded to the British crown in 1840. The section of Melanesia known as British New Guinea became a part of the empire in 1884; sovereignty was proclaimed in 1888. Cook, when cruising in the Pacific, discovered and explored myriads of islands that have since been included among Britain's colonial possessions. Of these the Fiji Islands are a large cluster, annexed in 1874. The English flag floats over the Harvey Islands, the Gilbert Islands, Pitcairn, and a host of others in the south seas. The latest acquisitions are the Santa Cruz and Duff groups.

Such is in brief the story of the building of the mightiest empire that the world has known. It is a bare recital, with the color and romance omitted, of the steps by which England became the mother of a multitude of colonies as well as mistress of the seas. Space is lacking to tell in detail of the feats of valor, the deeds of heroism and endurance that form the dramatic incidents of a tale of wonderful fascination.

(End of Required Reading for November.)

THE NICARAGUA CANAL.

BY DAY ALLEN WILLEY.

TO connect the waters of the Atlantic and Pacific at some point on the American continent has been the study of eminent engineers for three quarters of a century. The formation of Central America caused this portion of the continent to be the scene of operations as early as 1826. Hon. De Witt Clinton, of New York, was instrumental in having a route for a ship canal surveyed across the republic of Nicaragua. Twenty years later Cornelius Vanderbilt obtained a concession for a ship canal in the same locality, and even Gen. U. S. Grant became greatly interested in the project. At eleven different times surveys have been completed across Central America. One was for the ship railroad across the Isthmus of Tehuantepec, planned by James B. Eads, whose jetty system at the mouth of the Mississippi River has been one of the most notable engineering feats of the century. The rest were for waterways, but, excepting the Nicaragua, work was commenced on but one—the Panama Canal. This enterprise of Ferdinand de Lesseps was abandoned after the expenditure of $250,000,000, fulfilling a prediction made by General Grant, as well as several eminent engineers, that the Panama project of a tide-water canal was impracticable and that $400,000,000 would not build it. It was conceded that as a lock canal the Panama scheme was feasible, though much more expensive than the Nicaragua route. De Lesseps, however, followed his own theory and partly completed the work to a point twenty-four miles from its terminus, when disaster overtook the company.

One of the great obstacles to the building of the Panama Canal is the rapid rise and fall of the streams in the territory it would intersect, requiring, according to engineers, much higher and stronger retaining walls to counteract the sudden and enormous water pressure. It is claimed this condition is avoidable in the Nicaragua route, and, partly for this reason, it is preferred by most of the engineering experts who investigated the several proposed lines. Among them were the late Admiral Daniel Ammen and Mr. A. G. Menocal, both of whom devoted years to its study. Acting largely on their ideas, the Maritime Canal Company, which succeeded all others, let a contract to the Nicaragua Canal Construction Company, and about $4,000,000 had been expended when a receiver for the latter was appointed in 1893. The work completed consists of about twelve miles of tramroad for hauling material and the excavation of a mile of the channel near San Juan, the eastern terminus. The company also built a pier 1,000 feet long to deepen the San Juan Harbor.

The topography of Nicaragua is remarkable. A steamship of 600 tons, drawing ten feet of water, can go from New York to a point twelve miles from the Pacific Ocean, which one can see from her masthead. In a distance of 155 miles from the coast is an elevation of 110 feet. Yet a navigable waterway exists the entire distance through the San Juan River, entering the Caribbean Sea at Greytown or San Juan and Lake Nicaragua, of which it is the outlet. The isthmus is nearly cut in two by this feature of the country. But a great barrier exists on the Atlantic side in the foot-hills of the mountains. Here the waters encounter a rocky formation three miles in thickness and nearly 150 feet in height. The work of cutting through this barrier constitutes the main portion of the undertaking, compared with which the balance is child's play.

The channel, artificial and natural, according to the latest and revised estimates of engineers, will be 1,694 miles long, of which 26.8 miles will be excavation, 64.5

miles will be through the San Juan, and 56.5 through Lake Nicaragua, while by constructing dams, navigable basins 21.6 miles long will be created. The channel will be 110 feet above tide-water at its highest or summit level, which will be maintained for a distance of 153.2 miles by a series of six locks 650 feet long and 50 feet wide. The greatest height or lift of these locks will be 45 feet, and their construction will be one of the most notable engineering feats in history. They will elevate a wall of water 650 feet long, 80 feet wide, and 30 feet deep to the altitude specified so quickly that a steamship can pass through one of them in forty-eight minutes. The famous Canadian canal system by which the rapids of the St. Lawrence River are avoided include locks from 9 to 13 feet, but the highest of these is less than a third of the largest Nicaragua lock. Inside as well as outside of the locks, the minimum depth of water is to be 30 feet. The bottom width outside of the locks is to be 100 feet.

In passing from the Atlantic to the Pacific by this route a steamship may be said to ascend three huge steps filled with water; they are 30, 31, and 45 feet high. She then sails over 100 miles along a liquid plateau, and reaches the Pacific by descending three more steps, two of which are 42½ feet and one about 30 feet high, the latter corresponding to the tide. The plateau or long level is formed by the lake and river and artificial basins to be created.

It is calculated that to cut through the three miles of rock wall fully five years will be needed, allowing ten hours for a day's work. Engineers agree that fully 17,000,000 cubic yards of rock must be removed, in addition to 20,000,000 yards of rock and loose material, while 60,000,000 yards of earth can be dredged. The hardness of the rock formation will be a most important factor. If the substratum is softer than that above, as is often the case, the time required to remove it may be less and the expense decreased accordingly. The work is such, however, that forces can be employed simultaneously in dredging, excavating, rock-cutting, and lock and dam-building, while the necessary machinery can be placed all along the route if desired, by constructing a tramway at the beginning of operations.

Besides the construction of the locks and the channel, another notable engineering work will be the building of dams required to fill the basins already alluded to. The principal one will be across the San Juan River at a point nineteen miles from where it enters the sea. While the river is from 600 to 1,000 feet in width, the dam is required to be 1,900 feet wide and 70 feet high. It will increase the natural depth of the river from 14 to 70 feet, elevating it at this point to a height of but four feet lower than the surface of the lake, or 106 feet above tide-water. This is what is known as the Ochoa dam. The Toloa dam on the Pacific section will be 1,800 feet long, also 70 feet high. These two dams will be among the longest and highest ever constructed for any purpose. They are to be located at points where the watercourse passes between high bluffs of rock formation. They will be composed of rock masonry "anchored" into the bluffs. Incidental to the canal proper will be the improvement of the harbor at the eastern end of San Juan and the construction of a harbor at Brito on the Pacific coast, the western terminus. This work will necessitate 4,000 feet of breakwater at a cost of about $3,500,000.

The cost of the Nicaragua Canal has been variously estimated. Those who oppose it claim it could not be built for $250,000,000. Mr. Menocal has given an estimate of $65,000,000, and a board of English engineers placed it at about $66,000,000, which includes $16,000,000 for contingencies. The Walker Commission, appointed by the government, the last to go over the route, it is understood estimates it at about $125,000,000 maximum. Since the original calculations were made, however, improved machinery and competition in work of this kind has considerably lessened its cost. In the work on the Chicago Drainage Canal dredges were used

which could remove 250 yards an hour, while a system of cantilever conveyers would transfer material at the rate of 500 yards an hour. On the Mississippi River a dredge was tested in 1896 which actually removed from 6,000 to 8,000 yards of loose bottom per hour. With such apparatus as this the excavation of the Nicaragua Canal can be greatly reduced both in time and cost over even the latest figures, while the manufacture of explosives has made such strides within a few years that the removal of rock areas even several miles in extent is not such a difficult undertaking as formerly. The destruction of the Palisades of the Hudson proves what can be accomplished with modern explosives, for here walls of rock over 100 feet high have been literally torn away.

The promoters of the Nicaragua Canal are being aided in their efforts by a singularly fortunate combination of circumstances. In the past they have been able to put forth strong arguments in its favor, but the Spanish-American War, our annexation of the Sandwich Islands, and the sudden but greatly increased interest in foreign commerce have powerfully assisted their cause. The successful but hazardous journey of the battle-ship *Oregon* from the Pacific to the Atlantic coast and the important part that vessel played in the battle of Santiago demonstrate the need of a canal by which our warships in one ocean can be readily transferred to the other. Otherwise we must keep a much larger reserve fleet than necessary on both the Atlantic and Pacific coasts. Naval strategists argue that without the canal the Pacific States are as isolated as Hawaii as far as naval protection is considered.

The American flag in the Pacific is another argument used by the navy. We must have the canal through which to send coal and other supplies to foreign stations and in order to move vessels quickly to Honolulu, to Manila, or any other point required. The control of such a canal by the United States, they also claim, will greatly strengthen our relations with Mexico, Central, and South America, as these countries must be on friendly terms with us in order to obtain the right to utilize it. The same reason is given regarding Europe, it being advanced that the canal will greatly increase our importance in the Old World from a military and naval standpoint. Another consideration is that in Lake Nicaragua the government could establish a naval rendezvous where ships could be overhauled and docked in fresh water, which is very beneficial in removing the marine growth on the hulls of iron ships. The location of the station would also make it accessible from either coast and avoid long trips for repairs, while there is ample room to anchor the entire navy in deep water, the lake for 60 miles varying from 40 to 240 feet deep.

In the widespread interest aroused so recently in foreign commerce, the markets of the far East have been the subject of much inquiry and discussion, which has been strengthened by the annexation of the Sandwich Islands. One of the strongest original reasons for the Nicaragua waterway was the opportunities for increased trade relations between the Eastern States and the Pacific coast which it would afford, but steamship companies establishing lines to San Francisco via the Nicaragua Canal would not stop here, but continue to Honolulu, Yokohama, Tokyo, Hong-kong, Manila, and possibly Australia. The broadness and opportunities of the oriental market would be too tempting to withstand. Through the Suez Canal and around the Cape of Good Hope comes the bulk of our imports from Asia, destined for the states east of the Rocky Mountains. It is unnecessary to say that not one per cent comes in ships of American register. With lines via Nicaragua, exporters and ship-builders argue that the business between the Atlantic, Gulf, and Pacific seaports would be enough to warrant constructing steamships in our yards for the Asiatic trade, as at least a portion of a cargo both ways, so essential to profitable maritime business, would be assured as far as the Pacific coast, if not the Asiatic ports.

The last two years have shown beyond a doubt that American manufacturers can

make lower prices than all competitors in the principal markets of the world, on steel rails and billets for example, while locomotives and other machinery are taking precedence over the work of the best European plants where the conditions are equal. In other words, our makers of metal products can undersell all others if they can obtain the same rate of transportation as their rivals. The writer knows of more than one large order, however, which could not be filled, as the cost of transportation was too high. This was caused by the fact that the vessel owner could not obtain return cargo to this country from the market where the shipment was to be made, and consequently was compelled to charge nearly double the usual rates to come out without loss. It is the opinion of many of the largest exporters that with the canal route more equitable rates can be secured, as it will increase the import as well as the export business.

How far reaching would be its effect on the Southern and Western States cannot be more than predicted. No question arises over the assertion that it would greatly stimulate the shipment of southern coal, iron, cotton, and tobacco and goods from the middle West to the Pacific coast, and greatly increase the sale of cotton goods, for example, in the Chinese and Japanese markets, where they have already been introduced with success. It would certainly place us in a better position to secure the trade of Western South America, which is at present almost entirely controlled by Europe. The effect of the Nicaragua Canal upon the Suez and the Cape of Good Hope routes between Europe and Asia has been frequently cited as a strong argument in its favor. Undoubtedly it would deprive the Suez Canal of the cargoes to America which now pass through it, but the more conservative doubt if it would effect it to any perceptible extent, owing to the small difference in distance. Vessels going around the Cape of Good Hope might be diverted to Nicaragua, as it is well known that the dangers of navigating the Pacific are far less than the Atlantic and Indian Oceans, owing to the infrequency of storms. This will always be a consideration with vessel men and insurance companies.

As to time and expense of a voyage, a few statistics may be given. To cross the Atlantic, 3,165 miles, the cost of operating a steamship carrying 10,000 tons is about $13,000. To go from San Francisco to New York via the canal, the same ship would cover 4,925 miles and the cost would be $19,350; the time would average sixteen days. Going through Magellan Straits she would cover 13,174 miles, would occupy forty-five days, and the cost of the trip would be fully $50,000. The following table shows the distance which would be saved by the canal between some of the important ports:

	Dist. via Magellan.	Dist. via Good Hope.	Dist. via Nic. Canal.
New York to San Francisco,	13,174		4,907
" " Seattle,	13,935		5,665
" " Valparaiso, S. A.,	8,440		5,014
" " Sitka, Alaska,	14,439		6,177
" " Honolulu,	13,290		6,417
" " Hong-kong,		13,750	10,692
" " Yokohama,		15,217	9,227
" " Melbourne,		12,830	9,862
New Orleans to San Francisco,	13,539		4,147
Liverpool to San Francisco,	13,494		7,627
" " Honolulu,	13,610		9,137
" " Yokohama,		14,505	11,947

Would it pay financially? Here is the question which has perhaps been most discussed and where the estimates most widely vary. The Suez Canal Company has received tolls of $14,500,000 in a year, and as high as 8,750,000 tons of freight have passed through the canal in the same time, on which its receipts were $1.83 to $1.90 per ton. The Nicaragua Canal will receive all the tonnage passing around Cape Horn and through Magellan. It will receive some that goes by the Cape of Good Hope, and a large tonnage going by the transcontinental railroads will be diverted to it, as much of the heavy freight can be taken by vessels via the canal at much lower rates than by rail, and the goods will be landed in San Francisco, for example, within two or three days as soon as if sent by ordinary trains. Averages of rail and water transportation show that the cost by steamship is from one to two mills per ton per mile on the open sea and four to seven mills on lock canals. The minimum cost

per ton on railroads having grades such as the Pacific systems is nine to eleven mills per mile.

The principal authorities on transportation statistics have made estimates that the Nicaragua route should divert from 2,000,000 to 3,000,000 tons of low rate freight, such as flour, dry goods, machinery, coal, etc., from the overland traffic. Suppose 2,500,000 tons were diverted to steamship lines from the Atlantic and Gulf ports, going by the canal route. With the usual ocean tonnage from New York to the Pacific and other vessels which would go through the canal, a conservative calculation places the annual total at 7,000,000 tons. At the lowest Suez Canal rate this would give an annual revenue of $12,810,000. It has been calculated to set aside $1,500,000 a year for canal maintenance, etc. This would leave $11,310,000—11 3–10 per cent—on an investment of $100,000,000, Mr. Miller's estimate of the cost of the waterway, and 9 1–8 per cent on the cost based on the Walker Commission's report. Apparently the claim of the promoters that it will return substantial dividends is well founded, if the Suez Canal is any precedent, for this company has been paying dividends of from fifteen to nineteen per cent annually.

The effect of the canal in developing our western coast has been another argument advanced by many who believe that with the expansion of our trade in the Pacific, San Francisco is destined to equal New York in commercial importance, and that the Pacific States are to be the center of the future American empire. True it is that the metropolis of the Pacific coast is most fortunately located, if the country's development is to continue, as many would have us to believe. And the canal would certainly play an important part in such a development.

THE KLONDIKE GOLD FEVER.

BY D. ZAHN.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE GERMAN "UEBER LAND UND MEER."

WHEN gold was discovered in California many thousands traveled westward over the pathless hills through thick and endless forests, and for many days rode over broad, sterile plains whose only vegetation consisted of prickly cactuses. Thousands succumbed to the intense fatigue and privations without reaching their goal, and their bleaching bones served as waymarks to later comers. Those who arrived in the promised land found a wild, motley confusion, without law or order. Each one took his life into his own hands, and the most skilful "man killer" was most highly esteemed. It was not long until there were organized vigilance committees, who carried out the lynch law with most relentless rigidity. Only a small part of these committees was composed of good, order-loving citizens; the greater part consisted of the rabble who deserved no better fate than to be delivered to Judge Lynch. But finally law and order triumphed, and from the confused conditions there developed a high civilization, such as is to be found only in the United States.

Klondike has really to struggle through the same clarifying process. There each man makes his own law and the revolver alone settles the strifes, for, although the United States, as well as the Dominion of Canada, has sent troops into that region, it is absolutely impossible for them to be everywhere at once. Alaska alone is almost half as large as the whole of the United States. Although in many sections entirely waste and unfruitful—in winter the sun appears only from three to four hours each day—Alaska is rich in minerals, and doubtless iron and coal deposits will be discovered as soon as the land is more fully opened to civilization.

The Klondike gold fever broke out in August, 1896, when reports of the rich

finds in the Klondike River came pouring in. George Cormack was the first who settled there, and soon the Klondike and Yukon territories were talked about throughout the whole world. The name Klondike, introduced into the gold-diggers' language, is a corruption of the Indian name "Throndink," and it means water full of fish. Its waters, a long time ago the favorite fishing-ground of the Indians, disembogue into the Yukon forty-five miles below the mouth of the Sixty Mile River and fifteen miles above old Fort Reliance. Other rivers near the Yukon, as the Forty Mile, Birch Creek, American Creek, Mynook Creek, Klondike River, etc., are now also considered auriferous. Gold has been washed out in Gold Creek amounting to from $10 to $100 per pan; in Border Creek and Quartz Creek, from $3 to $4, and in Deadwood Creek auriferous quartz has been discovered which yields from $50 to $75 per ton. The engineers whom the Geological Society sent to Alaska have found, after exhaustive investigation, that the gold belt in the Yukon region is more than five hundred miles long and one hundred miles wide, and it is estimated that during the year 1897 almost twenty million dollars were obtained from it. Gold is yet worked in the old romantic way with pick and shovel, but the American spirit of enterprise immediately brings hydraulic machines to the spot in order that by the aid of all the means supplied by science the vast riches may be completely removed.

The difficulties of living in the Klondike and of traveling there during the last winter are in no way to be undervalued, though ignorance and avarice worked hand in hand to lure thousands of men to destruction. The reports of the quantities of gold recently discovered, which describe the finds as if one needed only to pick up the precious metal or as if the lumps of gold grew on bushes and only needed the plucking, aroused large numbers of the uneducated to feverish excitement. Thousands set out blindly for the promised land without knowing how they could reach it, without wishing to listen to good advice, without heeding the warnings, yes, even without being supplied with sufficient money—absorbed by a single idea, to get gold in large quantities. Most of them perished miserably.

An expert gold-digger gives the following suggestions, which are worthy of attention:

No one should undertake the journey without having on his arrival in Seattle at least six hundred dollars in cash at his disposal. He should purchase beforehand the necessary provisions or their equivalent, since the Seattle merchants are prepared especially for this business. Above all, he should not be in too much of a hurry. There is plenty of time if he sets out in April, for the many thousands who leave Seattle in February have to endure the most frightful hardships, and later, at the beginning of the mild weather, they are easily distanced. In the middle of May the first ice begins to break up, in June it is melted, and in September winter comes again and throws its rigid blanket over water and land.

Up to the end of March, 1898, the railroad companies had received requests for transportation from almost one hundred thousand persons. Six hundred dollars to each of one hundred thousand immigrants means a capital of sixty million dollars. It is now estimated that only about five per cent of all who go to the Klondike return wealthy, and on this account every one who has a sure income anywhere would better remain at home. The cost of travel has been reduced about thirty per cent since the middle of March of this year. The Canadian Pacific Railroad began the rate war in the Klondike business when it reduced its fare from Montreal to Seattle from one hundred dollars to thirty-five dollars.

Of the American lines the Chicago, Quincy and Burlington, and the Missouri Pacific took up the war. They operate from Kansas City to St. Paul. The reduced fare from St. Paul to Seattle is fifteen dollars, from Kansas City, ten, from Memphis, twenty-two dollars. The usual price from the last-named place is sixty-two dollars. The passenger pays the full regular price for his ticket and at the place of departure receives a certificate redeemable for the rebate.

There is yet to be found a railroad company which has not honored such certificates.

Living in Alaska and in the Northwest Territory is ten times as expensive as anywhere else in America. Oats cost $50 per sack, meal $.50 per pound, a glass of whisky, $.50, a pack of playing cards, $1, and shaving $.50. The small dogs which are hitched to sledges as draught animals for the transportation of goods, and without which living and traveling in Alaska in the winter would be impossible—they must do all the work which in summer is assigned to the boats—cost from $100 to $350 apiece. Four dogs can draw a pack of a thousand pounds. These animals are usually tough and sleep in the snow during the coldest winter. They feed on dried salmon, of which Alaska has a superfluity.

The lack of food and the threatening famine in Alaska recently induced the Congress of the United States to appropriate two hundred thousand dollars for assistance. Five hundred and thirty-seven reindeer with Laplanders accompanying them were imported from Lapland in order to introduce means of support.

The march of six hundred miles overland from Dawson City to Dyea, over frozen lakes and rivers in the winter, exceeds in hardships and terrors the expeditions into the Dark Continent. One of my friends who made this journey into Alaska last November writes:

The raging currents of the rivers make it doubly dangerous to cross them in winter. The ice along the shore, which appears with the first frost, breaks loose and is whirled down the stream in thousands of blocks of all sizes and shapes. The falling snow is caught up between them and whirled into great disks which, at the next frost, are pressed into hard, dangerous masses. When we reached the Hootalinqua River, we found it covered for hundreds of miles with blocks of ice which the river carried along with fearful rapidity, so that further travel with boats was impossible. A few hours after we had drawn the boats up on to the bank the ice began to pile up on the lower part of the river, and in the course of a few hours the water rose seven feet, carrying with it all the boats which had not been drawn up high enough. During the whole of the following night the din and the roar of the struggling masses of ice kept us awake. Millions of tons of ice blocks, moved forward by the raging current, cracked and thundered in the powerful impact against millions of tons which lay piled up in the shallow places. This frightful war between the giants of nature was continued during the whole night with terrible force and when we looked around the next morning, we saw the path to Dyea covered with blocks of ice which were piled up to a height of twenty feet. Over this we climbed during the day; during the night we slept on the ice, wrapped up in blankets, while the thermometer often fell to sixty degrees below zero. Many of us had frozen hands, feet, and face. One man with his frozen feet hobbled about twenty-five miles over this terrible path and on his arrival at Five Finger Rapids was obliged to have both legs amputated below the knee. The toes of another were broken off, where, on account of his worn-out foot-gear, they came in direct contact with the ice.

Such accounts certainly cannot induce any one to undertake the journey to the new El Dorado, but the gold fever is on the increase rather than on the wane, and there are always thousands ready to make the journey to the Klondike, a journey which brings destruction to most of them, and to a very few the longed-for riches.

THE EMPEROR OF AUSTRIA.

BY SYDNEY BROOKS.

THE jubilee year of Francis Joseph, emperor of Austria and king of Hungary, has been one of characteristic unhappiness and misfortune. The last twelve months have seen the dual monarchy brought to the verge of disruption, the Vienna Reichsrath disgraced by a session of outrageous disorder, the long struggle between the Germans and Czechs for supremacy in Bohemia raised to a point of extremist bitterness, and finally, only a few months ago, the empress assassinated by a member of that peculiar and formidable sect of whose opinions and motives European

statesmanship is still in most unstatesmanlike ignorance. The year of the emperor's accession hardly saw the empire in greater peril; the years of Solferino and Sadowa and of the crown prince's death hardly brought with them such a complication of poignant suffering as this year of jubilee that was meant for congratulation and festivity. The best-beloved and most hapless of all continental monarchs reaches the fiftieth anniversary of his troublous reign under the double cloud of public and private catastrophe.

In this respect 1898 is only too like the years that have gone before it. Political crises and personal griefs have been the emperor's abiding companions for fifty years. There has scarcely been a moment since the great revolution of 1848 when at least one of the many races in his polyglot realm was not sulking in discontent or openly rebellious. The romantic struggle of the Hungarians for independence lasted during the first eighteen years of his reign. Since 1866 the pivot of all Austrian politics has been the demand of the Czechs for home rule in Bohemia, a demand still unsatisfied and productive of violent racial enmities. In the face of the two national disasters inflicted by France and Prussia, of the expulsion of the Hapsburgs from Italy and from the German Confederation, of this failure to settle a domestic problem as pressing now as it was fifty years ago, one might think it a sufficient matter for congratulation that any ruler could survive to celebrate his jubilee.

Yet it would not be safe to assume that any other monarch could have fared better than Francis Joseph. Austria-Hungary is a realm of almost unique conditions. Smaller than the state of Texas, it is peopled with a crowd of jostling nationalities, who dwell side by side without mingling, fiercely seclusive, jealous, and hostile. Among its 40,000,000 inhabitants are to be found nine or ten different languages and dialects and the branches of four distinct races—the Slav, the Teutonic, the Latin, and the Ural-Altaic. The Slavs, split up into Czechs, Slovaks, Poles, Ruthenians, Slovenes, and Servo-Croats, number over 22,000,000. Their influence is by no means so great as their numerical strength, partly because they are divided among themselves by differences of speech, creed, and political aims and partly because their geographical distribution makes racial unity impossible.

The same position of inferiority belongs to the two branches of the Latin race, and for the same reasons. On the other hand, in the Austrian half of the monarchy the Germans form a compact and closely united body of over 8,000,000, superior in numbers to any of the surrounding sections of the Slav race. And in Hungary over 6,000,000 Magyars occupy the center of the country and another million is quartered in Transylvania close by. The position, therefore, is briefly this, that in one domain of the realm the Germans and in the other the Magyars are the dominant race, both ruling over hordes of subject nationalities of Slav and Latin extraction, and bent at any cost upon the maintenance of their ascendency.

The supremacy of these two races has not been reached, and is not upheld, without ceaseless struggle. The equality of all nationalities has been proclaimed by successive emperors to be the key-note of their policy, and the various divisions of the Slav race deeply resent being pushed to the wall and treated as an inferior people. Their contention that they are just as much entitled as the Germans or Magyars to have a voice in the government of the monarchy is strengthened by the presence of certain historical rights. Austria-Hungary is a collection of the scraps of empire that have fallen to the House of Hapsburg by the fortunes of war, marriage, and diplomacy. What is now Hungary was once the kingdom of St. Stephen, and what are now the crown-lands of Bohemia, Moravia, and Silesia used to form the Czech kingdom of St. Vacslav. The Magyars of Hungary and the Czechs of St. Vacslav offered their crowns early in the sixteenth century to the House of Hapsburg as a protection against the Turks, stipulating that their old rights of self-government should be preserved to them. The Haps-

burgs accepted the crowns, but neglected to observe the other provisions of the compact. Bohemia they treated as though it were a conquered province, quartering upon its northern borders a large German colony under orders to stamp out the very idea of Czech nationality. Hungary they allowed the Turks to ravish at pleasure, and disregarded the appeals of the Magyars for assistance.

When Francis Joseph came to the throne he found the whole empire in revolt. The Czechs were clamoring for a restoration of their old kingdom, the southern Slavs were in arms against the Magyars, who were themselves in rebellion against the throne, the Italians were rising against the continuance of Austrian rule in Lombardy and Venice, and the people of Vienna agitating for political reforms. The young emperor sided with the Slavs as against the Magyars, called in Russia to his assistance, and after a sharp two years' struggle was able to announce that Hungary and the Italian provinces were "pacified." Severe vengeance was taken on the insurrectionists. Vienna was drenched in blood and the noblest of the Hungarian leaders imprisoned, banished, or shot. Of all the objects of this many-headed rebellion one only was attained, the release of the peasant from bondage to the lord.

The ten years that followed were years of pitiless reaction. An inquisitorial police ranged up and down the empire ferreting out treason. All semblance of public or private liberty was wiped out, the press gagged, the right of meeting and association denied, trial by jury abolished. It is not fair to credit the emperor, then a mere boy of twenty, with the mistakes and brutality of this period. The policy which his ministers chose for him was, in a word, the Germanization of the Austrian Empire. The aim of Schwarzenberg and Bach was to make each portion of the monarchy forget that it had ever had a history and language of its own. The realm was divided into sections and a swarm of German officials issued from Vienna to take charge of them and see that nothing remained of their old historical individuality. The German language was forced upon the public schools in Bohemia, Hungary, Transylvania, and Croatia, upon those who had joined in the rebellion and upon those who had not. Every race was called upon to forego its own tongue and customs, to forget all its traditions, and submit to be measured out by the foot-rule of German officialism.

The war with France broke the back of this impossible absolutism. The emperor's eyes were opened to its real effects when he found half his kingdom rejoicing in the success of the French arms. It is even said that several Czech and Magyar regiments had to be broken up to prevent their desertion to the enemy's side. Solferino not only obliged Austria to surrender the greater part of Lombardy; it convinced the emperor of the necessity of respecting the sentiments of the various races under his scepter. Bach was dismissed, and with him went an end to autocracy and German domination outside Austria proper. Francis Joseph took refuge in a constitution, the first and only Hapsburg to trifle with such modern specifics. Unluckily the constitution of 1861 did not prove a success. It pleased no one but the Germans, whose ascendency was maintained by a very clever and quite unconstitutional manipulation of the electorate. The Magyars refused to send any delegates to the proposed Parliament at Vienna. Hungary, they claimed, was an independent kingdom, legally entitled to manage its own affairs, and unable, except on the basis of autonomy, to enter into any arrangements whatsoever with other parts of the realm.

The emperor and his ministers did all they diplomatically could to win the Magyars over to the constitution. But the time for compromise had passed by. It had to be independence or nothing. The Magyars would not give way and the emperor had to. He had just about made up his mind to yield to their demands when the war with Prussia broke out. The result of Sadowa was the final overthrow of Austrian rule in Italy and the expulsion of the Hapsburgs from the German Confederation.

Austria was left face to face with her recalcitrant nationalities, her credit gone, her army disgraced, her international position at its lowest ebb. It was no time for prolonging the domestic crisis, and the emperor made haste to give the Hungarians all they had asked for. Centralization was abandoned, and at a stroke the Austrian Empire became the dual monarchy.

By the *Ausgleich* of 1867 Hungary was granted a Parliament of her own and the completest freedom in the regulation of her own affairs. The common interests of the two halves of the monarchy—naval, military, and diplomatic—are settled by a delegation from the two states meeting twice a year. A commercial and tariff union was embodied in the *Ausgleich*, and the contribution of each division to the imperial expenses was fixed at about thirty per cent for Hungary and seventy per cent for Austria. The *Ausgleich* is therefore a sort of deed of partnership between two states that acknowledge a common authority and certain common interests over and above their private and local affairs, in dealing with which each acts in perfect independence of the other. It is renewable every ten years by a two thirds majority in the Parliaments of Vienna and Pesth.

The effects of autonomy on Hungary have been wholly good. The Magyars have kept the government of affairs almost entirely in their own hands, and being naturally a most gifted and impetuous race, with an intense racial patriotism, have spared no effort to make Hungary the most forward and prosperous half of the monarchy. The Slavs and Rumanians who surround them have been persuaded or forced into acquiescence in Magyar domination, and the records of the last thirty years show the wisdom and energy with which the ruling race has encouraged every form of industrial development.

On the Austrian division of the realm Hungarian independence has had an equally deep, though not an equally fortunate, effect. The claim of the Czechs to home rule in Bohemia rests on the same historical basis as that of the Magyars in Hungary, and was pressed with redoubled vigor when the emperor showed by consenting to dualism that he had in part given up the principle of centralization. But the Czechs have had two opponents whom so far they have been unable to get the better of in their struggle for autonomy. The German colony in Bohemia is unalterably opposed to any system of home rule that would place them at the mercy of a race whom they despise and fear. And the Magyars, who have Slav troubles of their own to attend to in Hungary, use all their influence to prevent the growth of Slav authority in any part of the empire. Sooner than hand over a body of their fellow countrymen to Slav domination, the Germans of Austria, if their protestations are to be believed, would change the Hapsburgs for the Hohenzollerns and join the great German Empire across the border; and rather than consent to such an increase of Slav influence as Bohemian autonomy would bring with it, the Magyars threaten to break loose from Austria and set up a kingdom of their own.

Of this struggle, which has gone on for thirty years amid riots and violent racial collisions, the language question, of which so much has been heard during the last eighteen months, is an important part. When Count Badeni in the spring of 1897 placed German and Czech on an equality as the official languages of Bohemia the Germans saw in the decree the beginning of Slav supremacy. They raised the racial issue at once and refused to allow any measure to pass the Vienna Reichsrath till the hated ordinances were repealed. The dismissal of Badeni did little to pacify them so long as his decree remained uncanceled. To carry their point they even blocked the *Ausgleich* and brought on a constitutional deadlock between the two halves of the monarchy. At the time of writing the language ordinances have not been withdrawn and the *Ausgleich* has not been renewed; but it is not, perhaps, very venturesome to prophesy that eventually the Germans will have their way and the compact that binds Austria to Hungary be preserved. Possibly the tragic death of

the empress may have some effect in moderating the passions and antipathies of all parties and so pave the way to a compromise on the German-Czech feud.

In more purely local politics Francis Joseph has won, not altogether unjustly, a reputation for liberalism. Austrian liberalism is not the liberalism of England or America, and the value of the emperor's reforms must be arrived at by comparing the Austria of to-day not with any other country but with the Austria of fifty years ago. On this basis the progress is remarkable. The Austria that the emperor succeeded to was in all its essentials a medieval state. The Austria he is now the ruler of is on about the same political level as the England of 1830. That is to say, the fundamental liberties are secured—trial by jury, the freedom of the press, and the right of public meeting. The schools have been freed from clerical control and the peasants raised from their state of serfdom. On the other hand, the system of voting by "class interests" places the power almost entirely in the hands of the nobility and large landowners. Francis Joseph's liberalism must therefore be taken at considerable discount. He is a radical when compared with Metternich, but a hidebound Tory by the side of Gladstone.

There was a time, soon after the failure of the Hungarian insurrection, when the emperor was decidedly unpopular. The charms and beauty of his wife did much to turn the current in his favor, but the complete reversal of public opinion concerning him, both at home and abroad, is due before everything else to his own personality. In an easy, indolent society the emperor has worked as very few day laborers would care to work. Bismarck, who was a good judge, put him down as the most industrious man he had ever known. In a peculiarly haughty and highly exclusive aristocracy the emperor has mixed freely with his people, meeting them as man to man without condescension and without formality. One day in each week has for years past been set apart for a public reception, the callers, down to the poorest in the realm, being shown one by one into the emperor's presence and encouraged to talk as to a friend whose age and kindly nature fitted him to advise and succor. While performing with exactitude all the ceremonial duties of his office, the emperor's private inclinations run on quieter and more homely lines. Simple in all his tastes, direct in speech, frank in manner and nature, patient and methodical in his work, his whole character is got up in good, plain black and white. Everybody can sympathize with him because everybody can understand him. Men of his stamp are common enough in private life and always popular and trusted in. On a throne such qualities as his are rare enough to arouse enthusiasm.

His subjects have repaid his honest and ceaseless labors for their good with an affectionate devotion such as only one other ruler on this earth commands. The rivalries of the different races and factions have spent themselves in mutual attack and defense and left the emperor's popularity untouched. Francis Joseph is the one point of agreement common to the whole empire. The Magyar may hate the Slav and the German the Czech, but all unite in honoring the old public servant whose patient wisdom has found a way out of so many crises and difficulties. Indeed, the very strength of this bond is a source of anxiety to those who look forward to the time when in the course of nature it no longer exists. Who is there to take Francis Joseph's place and stand up with a tithe of his influence against the forces that seem to be hurrying the empire to dissolution? Two ambitious and expanding nations hang round the borders of the dual monarchy in kinship, between them, with over thirty millions of its peoples. The monarchy itself is torn with dissension, and one half of it paralyzed by a deep-seated racial antagonism that seems incapable of settlement. For the last half century its prop and rallying point has been Emperor Francis Joseph, now in his sixty-eighth year. When that support is withdrawn it is not easy to see how Russia and Germany can be prevented from deciding the fate of Austria-Hungary.

THE CAMPAIGN IN THE PHILIPPINES.

BY WILLIAM GILBERT IRWIN.

WITH THE 10TH REGIMENT PENNSYLVANIA VOLUNTEERS AT MANILA.

OUR land and naval operations in the Philippines form the most brilliant chapters of our war with Spain. From the time of Admiral Dewey's signal victory over the Spanish fleet under the guns of Cavité here in Manila Bay until the fall of the Philippine capital three and one half months later the eyes of the world have been turned hither, and in this time these heretofore almost unknown islands have been brought before the world in their true light after having been obscured by Spanish misrule for so many centuries.

Admiral Dewey's victory molded the policy of our government regarding these islands and resulted in the mobilization of our army of occupation at San Francisco and the transportation of the 20,000 troops to Manila Bay. From a score of states came the volunteers who in a great degree make up this army. East and West, North and South contributed their share to the forces massed at Camp Merritt and at the Presidio in San Francisco, and that city never before saw such a sight. Day and night the blare of bugle, the roll of drums, and the measured tramp of the soldiery echoed through the streets of the Pacific metropolis and never were soldiers treated more royally by the populace.

The first expedition sailed out through the Golden Gate on May 25. Watching from an overlooking height the departing ships, whose decks swarmed with armed men, viewing the shores and piers and the hundreds of crafts out in the bay, all aflame with banners and crowded with thousands of people, listening to the thunder of the saluting guns and the loud acclaim of voices, one could have fancied another departing Argos, and the prayers of a nation, perhaps those of more than one, went with the fleet on its long voyage across the blue Pacific.

No such expedition had ever before left these shores of freedom, and freedom was its mission. The sailing of these ships proclaimed that our war for humanity was to extend farther than to suffering Cuba. On the other side of the world, in the land of everlasting sunshine, where lie the fair Philippines, as much down-trodden by Spanish oppression and stunted by Spanish misrule as Cuba, the guns of our fleet had already spoken.

Off Cavité the wrecks of the Spanish fleet straggled above the waters of the bay. The great Krupps, which for many years had guarded the Philippine capital, were silent, and Cavité was ours. Out at the entrance of the bay the batteries on Corregidor Island and those across at Kalumpan Point had been destroyed. Such was the situation at the arrival of the first expedition late in June.

Cavité is the key to the whole situation. It is to Manila what Sandy Hook is to New York or what the Presidio is to San Francisco. Its fortifications are strong, and are evidences that the representatives of Spanish rule on these islands have found time aside from that devoted to personal gains to put these defenses in good shape. That the forts surrendered to our fleet without any show of resistance worthy of mention can be ascribed more to fear caused by the destruction of the Spanish fleet under the very guns of the forts than to any other cause. Cavité contains the navy-yard, chief arsenals, and military storage buildings on these islands. Here our workmen have been turning out supplies for our army and navy ever since the surrender. Cavité also contains strong prisons and dark dungeons, which have seen countless inhumanities committed in the name of justice.

The first expedition was closely followed

by the second and third, the latter bearing Major-General Merritt, commander-in-chief of our army of occupation and military governor of these islands. A fourth and a fifth expedition followed the others across the Pacific, but these arrived too late to take part in the campaign against Manila, to share its hardships and the glory of the conquest. At any time our fleet could have forced the surrender of the city, and the delay was only due to the lack of troops to occupy it and thus make effective the work of the fleet.

When on July 29 Major-General Merritt arrived there had been no change in the situation. The insurgent forces, seizing upon the opportunity to resume their struggle for liberty, had made heavy inroads upon the Spanish forces about Manila Bay, and by their guerrilla warfare had really confined the Spanish to the outer defenses of Manila. When the troops of the first expedition had been transferred from Cavité to Camp Dewey, formed by the second expedition on Manila Bay near the native town of Paranique and within three miles of the walls of Old Manila, and those of the third expedition had been landed, General Merritt had nearly 12,000 men ready for operations against Manila.

Already the campaign had been opened. As early as July 20 the troops of the second expedition, comprising the second brigade of the army under Brigadier-General Greene, had established outposts within half a mile of Malate, the outlying fort of the city, and within a mile of Old Manila. On the night of July 31 and the morning of August 1 the opening battle of the campaign was fought. The Tenth Pennsylvania Volunteer Regiment, composed of 640 men under Col. A. L. Hawkins, comprising our outpost line, was attacked by the entire Spanish garrison, upward of 5,000 men, and for nearly four hours the command unaided held the Spanish army in check. During this time the Spaniards had made three determined attacks and our men were reduced to their last few rounds of ammunition. At this opportune time the First California Volunteer Regiment, the Third United States Artillery, with Krag Jorgenson rifles, and the Utah Light Artillery came to the support of the Pennsylvania regiment, and the Spaniards were driven back. In this opening battle we lost nine men killed and about fifty wounded. The Pennsylvania regiment lost seven men, and Captain Woods, of the First California Regiment, died from his wounds. The Third Artillery lost one man. The losses of the Spaniards were heavy, being over 200 killed and 600 wounded.

During the next ten days there was some sharp fighting, in which the Tenth Pennsylvania, First California, First Colorado, First Nebraska, and the First Oregon volunteer regiments, together with the Eighteenth and Twenty-third regular regiments and the Third United States Artillery, Utah Light Artillery, and the Astor Battery participated. But it was evident that the Spanish garrison realized the inevitable which they were facing and were only waiting for a chance to surrender. The end was soon to come. From time to time Admiral Dewey had withheld the fire of his guns, even at the sacrifice of our brave soldiers. Finally, on the morning of Saturday, August 13, after nearly a week's notice had been given, the guns of our fleet were turned upon the walls and forts of Manila and within an hour the white emblem of the vanquished supplanted the banner of Aragon and Castile upon the walls of the capital city of the Philippines, where with but one interruption it had floated ever since raised by Legaspi, over three and a quarter centuries ago. Then the fire of our fleet ceased and Admiral Dewey and General Merritt went on shore to arrange the formalities of the surrender. Before noon the stars and stripes floated from the walls of the city, and it was nearly 6 o'clock p. m. when the guns of our fleet thundered out their salutes in honor of our latest conquest.

Back of the bombardment of the city there is a circumstance which has not yet come to light. Soon after the reduction of Cavité, Governor-General Augusti offered to surrender the city, but the offer, made on conditions, was not accepted by Admiral

Dewey. After the arrival of our army of occupation this offer was again renewed, and finally through the Belgian consul was made unconditional. But the surrender of the city without a struggle would place General Augusti in ill favor with his government. Accordingly it was arranged that our fleet should open up fire on the forts, and shortly the white flag would be hoisted. So in the bombardment only the forts were fired upon and the destruction of these batteries attest to the perfect gunnery of our fleet. Only the *Olympia*, *Raleigh*, *Concord*, *McCullough*, and *Callao*, the latter a gunboat captured from the Spaniards, participated in the bombardment. As the white flag was not run up as agreed, a boat was sent in from our fleet to learn why the agreement was not carried out, and it was found that General Augusti, fearing his own soldiery, was awaiting the arrival of our forces. The land attack was made almost simultaneously with that of the fleet, and soon our troops marched into the city. Only Old Manila made any show of resistance, and there we sustained our only losses. In the presence of our fleet the guns of the forts dared not speak.

By evening the city was completely in our control, and for the first time in three and one half months the people of Manila had a night of rest and sleep. The occupation of Manila by our army was unaccompanied by any pomp or show. Neither was there any molestation of private property. When Cavité fell it was looted by the insurgents and a scene of carnage ensued before our marines could be landed. Hundreds of natives had enlisted in the insurgent army and served without pay with the one hope of participating in the looting of Manila. When the city fell they were excluded unless unarmed, and thus the scenes of horror enacted at Cavité were averted.

The day after our army entered the city General Merritt issued his proclamation forming a military government on these islands, and now he is the head of a military government embracing an area equal to that of New York, New Jersey, and Pennsylvania combined and a most heterogeneous population of nearly 9,000,000 souls. Published in English, Spanish, and the native language, the proclamation has been widely circulated, and more advanced steps toward the government of these islands have been taken. In the meanwhile our army of occupation, comprising 20,000, is occupying every quarter of Manila and Cavité.

Along the Pasig, where the shipping interests of Manila are centered, busy scenes are now being enacted. The raising of the blockade set commercial Manila on her feet. The river is now thronged with the sails of a dozen nations. The great custom-house is again full of action. All day long the Puerta de Espana is thronged, and Binondo, the business district of the city, is busier than ever before. The La Escolto and the Rosario, the great business streets of the city, now resemble business streets in New York or London. In Santa Cruz, in Quiapo, and in San Miguel are evidences that Manila is entering upon days of greater prosperity than she has ever known in her long history. From the outlying districts the natives are thronging in with their products. The Manila and Dagapin Railroad is again being put into operation.

Truly Manila is casting off her sleepy Asiatic ways, which have so long helped her Spanish rulers to keep her down, and she is assuming the activity characteristic of a Central or South American city. Spanish misrule is at an end. Our soldiers are occupying Old Manila, and the palace is the seat of our government. The old inquisitional prison has seen its last horrors, the "Dark Hole of Manila" exists only as a memory, and the famous La Lunetta, the bloody execution ground of Manila, as well as her fashionable boulevard, is now the camp-ground of our army. Under a just and stable government the future of these islands is destined to be as brilliant as the stars which shine in these unclouded skies, and in the near future they will wear a crown of eminence and of beauty and will assume their rightful position in the commerce of the world.

SOME AMERICAN WOMEN IN SCIENCE.*

BY MRS. M. BURTON WILLIAMSON.

I.

STUDY along scientific lines has been so quietly carried on by women that few persons not engaged in scientific investigation are aware either of the number or the activity of the women who are pursuing special lines in science. It ought not to be a matter for surprise that women should identify themselves with scientific research, either in the study of natural history or the more abstract sciences. But we cannot shut our eyes to the fact that sex prejudice in education has retarded mental development in women. For centuries the tendency has been toward cultivating the emotional, rather than the reasoning, faculties in women; the spirit of investigation now fostered has been either crushed or ridiculed.

While science has seen its greatest activity in this century, the advancement of women in science would not have been possible if the question of sex in education had not been held in abeyance. Coeducation in the common schools prepared the way for the higher education of women; once admitted to the high schools and lesser colleges they soon demanded entrance to the universities, and now that laboratories and museums of the latter are open to women their advance in science is only a question of time.

It would be impossible in a magazine article to mention all the American women who are to-day identified with science. Many of them are teachers, and some of them are doing work that entitles them to rank as fellows of the American Association for the Advancement of Science; others are enthusiastic students in natural history, and have accumulated valuable private collections; some are illustrators, making drawings of scientific accuracy. As laboratory assistants many women are doing good work. Others are aiding the cause of science by generous gifts of money.

MARGARETTA PALMER.

* The writer desires to acknowledge her obligation to Dr. J. M. Schoeberle, of the Lick Observatory, University of California; J. W. True, United States National Museum; Samuel Henshaw, secretary Boston Society of Natural History; Clarence M. Weed, New Hampshire College, and others for data received.

This article will treat of living women scientists—outside of medicine, where a long list of names might be given—who have published scientific articles or books, or are editing popular scientific magazines. Even with this limitation omissions will be apparent.

The science with which women were first prominently identified is that of astronomy, in whose service Miss Maria Mitchell (1818–89) won the first distinction as the discoverer of a comet in 1847 and as a teacher. To her devotion to science and the accuracy and inspiration of her instruction is doubtless due much of the success of her followers.

Dr. Dorothea Klumpke, a member of the astronomical staff of the Paris Observatory and chief of the bureau for the measurements of the photographic star charts, was a San Francisco girl. While in that city her work was recognized to be of a high order, and her many astronomical observations were published in numerous scientific journals. Miss Klumpke is said to be the only woman who has the distinction of having received the degree of Doctor of Philosophy from the University of Paris. Her chief work is an exhaustive memoir on the rings of Saturn, entitled "Contribution à l'Étude des Anneaux de Saturné."

MARY PROCTOR.

Miss Margaretta Palmer, born at Branford, Conn., while a student at Vassar College became interested in astronomy through the influence of Prof. Maria Mitchell and formed part of Professor Mitchell's "observatory family." After Miss Palmer's graduation she was Miss Mitchell's assistant at Vassar. Subsequently she pursued her work in Yale University, and as the result of her study "Determination of the Orbit of the Comet 1847, VI." (Maria Mitchell Comet) was published.

Miss Mary Proctor's work is in the line of popularizing the study of astronomy rather than making observations, although she was successful in her observation of the total eclipse of the sun that took place August 9, 1896. As the daughter of the late Richard A. Proctor, the atmosphere of her home was scientific, with photographs of the moon and stars adorning the library and works on astronomy and kindred sciences in every nook and corner. Miss Proctor in her home unconsciously learned to love her father's favorite science, although her early ambition was to be a landscape painter. She was born in Dublin, but was removed to London when only one year old, where she lived until she came to America in 1886. She was educated in London, her home being near Kew Gardens, and here she met such distinguished men as Tyndall, Huxley, and Herbert Spencer.

Miss Proctor is the author of a new book entitled "Stories of Starland," and has edited an astronomical department in several scientific publications. She is a fel-

low of the American Association for the Advancement of Science, the British Astronomical Society, and the Natural Science Club, and is a popular lecturer on astronomy.

Mrs. Christine Ladd Franklin, wife of Prof. Fabian Franklin of Johns Hopkins University, has won an international reputation by her researches. She was born in Windsor, Conn., and her childhood was spent in Windsor, New York City, and Portsmouth, N. H. Through her mother's influence her thoughts were turned toward a serious intellectual career, although her natural bent of mind determined the direction of her work, which has been in the line of mathematics, logic, and physiological optics, the theory of color vision being her specialty in the last-named subject.

MRS. CHRISTINE LADD FRANKLIN.

After graduating at Vassar College Mrs. Franklin (then Miss Ladd) pursued advanced mathematical studies, and it was upon the basis of work which she published at this time that Professor Sylvester, the eminent head of the mathematical department of Johns Hopkins University, urged her admission to that institution as a graduate student. From 1879 to 1882 she held a fellowship in Johns Hopkins University.

Mrs. Franklin has contributed many papers to scientific publications, of which the most important are the following: "On the Algebra of Logic," "On Some Characteristics of Symbolic Logic," "A New Theory of Light-Sensation," "On Theories of Light-Sensation," "The Normal Defect of Vision in the Fovea." The last-named memoir contains the announcement of Mrs. Franklin's discovery of the normal right blindness of the fovea. Mrs. Franklin has also been a frequent contributor to *The Nation*.

Prof. Ellen H. Richards, wife of Robert H. Richards, professor of mineralogy, mining, and metallurgy in the Massachusetts Institute of Technology, has been an indefatigable investigator in chemistry, besides attending to her duties as professor of chemistry in the Massachusetts Institute of Technology. The printed results of her scientific investigations in chemistry and cognate branches number some fifty papers and monographs written by herself and in collaboration with others. "The Chemistry of Cooking and Cleaning" is one of Mrs. Richards' well-known books. She has also written a little work on "First Lessons on Minerals." Her special lines of investigation are, however, sanitary problems, water analysis, ventilation, and food as a therapeutic agent.

Mrs. Richards was born at Dunstable, Mass., and was prepared for college at Westford Academy. Her taste for scientific

study was fostered by Professors Farrar and Mitchell while she was a student at Vassar College. After being graduated at Vassar she took a course at the Massachusetts Institute of Technology. It is said that her work in chemistry here was so exceptional that she overcame much prejudice against the higher education of women, although the concession was that "Miss Swallow is an exception." After her marriage to Prof. Robert Richards she remained at the Massachusetts Institute of Technology as teacher and investigator.

At the last meeting of the American Association for the Advancement of Science, of which she is a fellow, at Detroit, Mrs. Richards' papers were "A New Color Standard for Use in Water Analyses" and "Notes on the Evidence of Dissociation in Dilute Soap Solution." Mrs. Richards' researches in chemistry are recognized as valuable contributions to practical or applied chemistry. She has been employed by the state of Massachusetts to analyze drinking water from all parts of the state.

When in 1895 Miss Florence Bascom, M.A., Ph.D., accepted the chair of geology in Bryn Mawr College, the *American Geologist* said of her:

> Miss Florence Bascom, Ph.D., for the past two years a member of the corps of instructors in the geological department of the University of Ohio, has accepted a position in Bryn Mawr University. Dr. Bascom's record as a teacher and her thorough geological training assure the success of the department of geology at Bryn Mawr under her direction.

Since that time Dr. Bascom has written a number of monographs on geology, and is at present one of the editors of the *American Geologist*. Her contributions to geology have been published by the United States Geological Survey, the Geological Society of America, in the proceedings of the *American Academy of Science*, the *Journal of Geology*, the *American Geologist*, etc. The titles of some of these bulletins and papers are: "The Ancient Volcanic Rocks of South Mountain, Penna."; "Aporhyolite of South Mountain"; "Perido-steatite and Diabase"; "The Structures, Origin, and Nomenclature of the Acid Volcanic Rocks of South Mountain"; and "The Relation of the Streams in the Neighborhood of Philadelphia to the Bryn Mawr Gravel."

Dr. Bascom received her Bachelor and Master's degrees at the University of Wis-

MRS. ADA DEAN DAVIDSON.

consin and was a graduate student in geology for two years at Johns Hopkins University, where she received the degree of Doctor of Philosophy. She is a fellow of the Geological Society of America and also of the American Association for the Advancement of Science.

In popularizing the study of geology the name of Mrs. Ella F. Boyd, of Hyde Park, Mass., is worthy of mention. Mrs. Boyd is the author of "Geology of Hyde Park" and "Granites of Massachusetts," published as pamphlets. Her special lines of investigation are granites and relative rocks and the family relation of minerals and rocks through their chemical equivalents. She has a work in course of preparation entitled, "Helps for Teachers in Geology and Zoology." Mrs. Boyd, having had charge of these subjects in the Hyde Park schools, has gained practical experience. Through popular talks to clubs, etc., she has been able to simplify geology without losing scientific facts. Mrs. Boyd's influence has been felt and she has done much to stimulate observation. Her own field-work was done under Prof. George H. Barton after she had taken special geological training at the Massachusetts Institute of Technology.

Mrs. Ada Dean Davidson, of Indiana, one of the authors of "Petalocrinus Mirabilis," received her early education at Painesville Academy, Ohio, and later was graduated from Ingham College at LeRoy, N. Y., her native state. After her marriage to Lieut. James Davidson in 1864 she removed to Monticello, Iowa. This locality has an extensive bed of fossil coral mingled with crinoidal and brachiopodal remains, and during Mrs. Davidson's residence at Monticello she was interested in the geology of the neighborhood and collected the specimens that are described in the pamphlet just referred to. The first fragment of the crinoid—popularly known as "stone lilies"—"Petalocrinus," was found a number of years after she had begun to study the region, and after a search of five years a tolerably complete specimen was discovered. The first portion collected was about as large as a thumbnail. Mrs. Davidson's collection of American fossils of the Niagara formation is at the Armour Institute in Chicago.

During the Columbian Exposition Mrs. Davidson was one of the judges of awards

MARY A. BOOTH.

in geology. In 1891 she was an attendant at the International Geological Congress and helped to organize the Natural Science Club for women, of which she was president for three years.

Miss Mary A. Booth, editor of *Practical Microscopy*, is a native of Long Meadow, Mass. Her father, Lawrence C. Booth, was a mineralogist, his collections in minerals and Indian relics numbering many thousands of specimens. Miss Booth has been interested in microscopy for over twenty years. She is well known as a writer and lecturer on the microscope in nature. She is a fellow of the Royal Microscopical Society of London, and of the American Association for the Advancement of Science, American Microscopical Society, etc.

Miss Alice C. Fletcher needs no introduction to the public. Her writings and lectures on the Omaha and other tribes of Indians and her work in connection with the ethnol-

ogy of native tribes have given her a world-wide reputation. When the British Association for the Advancement of Science met at Toronto, Canada, in the summer of 1897, one of the members is reported to have said that "one of the objects of interest that had led him to cross the ocean to this meeting was the hope of seeing and hearing Miss Fletcher," and her paper on the "Significance of the Scalp-lock among the Omahas and of the Mystical Rites connected with it," which was read at the meeting, won high commendation from Sir William Turner and Prof. Daniel S. Martin.

MRS. SARA YORKE STEVENSON.

Miss Fletcher speaks and writes from personal knowledge and her many years of residence among various tribes, especially the Omahas, make what she writes valuable to students in anthropology, and her clear presentation of her subject makes her writings interesting to the general public. Some of her papers on personal studies of Indian life have been published in *The Century*. The *American Antiquarian*, *Science*, and other scientific journals have published her articles on scientific studies of the Omaha and Dakota Indians, and some of her papers read before the American Association for the Advancement of Science —of which she is vice-president—have been published in its proceedings. For some years Miss Fletcher has been connected with the Peabody Museum at Cambridge, Mass.

Mrs. Sara Yorke Stevenson, of Philadelphia, is a woman whom that city delights to honor both as an archeologist and as a representative American woman identified with the best interests of the city. Mrs. Stevenson is secretary of the Department of Archeology and Paleontology of the University of Pennsylvania, secretary of the University Archeological Association, secretary of the American Exploration Society, fellow of the American Association for the Advancement of Science, and a member of the American Philosophical Society, the American Oriental Society, the Oriental Club of Philadelphia, and numerous other clubs and societies. She is the author of the valuable historical papers on Maximilian which recently appeared in *The Century*.

Mrs. Stevenson was born and educated in Paris, France, her parents having removed there from Louisiana, where her father had large mercantile interests, besides being president of the Bank of Louisiana. When it was found necessary for them to return to America the daughter was left under the guardianship of Monsieur Jubinal, a distinguished antiquary and scholar, whose house was the center of a notable circle of distinguished men and women in literature, art, and science in Paris. Her early associations in this home gave her an impulse toward the study of archeology that only needed the friendship of men of science at a later period to develop into a study of archeology as a science.

At the age of seventeen Mrs. Stevenson was called from her studies in Paris to Mexico, where her mother was then staying. At a later period she went to Philadelphia, where in 1870 she was married to Mr. Cornelius Stevenson, a well-known citizen of that city.

So thoroughly has Mrs. Stevenson applied herself to the study of archeology, especially in Egypt and the Mediterranean, that in 1894 she was asked to lecture before the Peabody Museum at Harvard. She is said to be the first woman whose name had appeared on a Harvard calendar as lecturer. The University of Pennsylvania conferred upon her the honorary degree of Doctor of Science the same year, in "acknowledgment of her scholarly ability and eminent services in the development of its Department of Archeology."

During the Columbian Exposition in Chicago Mrs. Stevenson was appointed a judge for Egypt, Babylonia, and Greece in the Department of Ethnology.

MME. ALICE LE PLONGEON.

Mrs. Stevenson is the author of several monographs on archeological subjects, as well as numerous reports of that department in the University of Pennsylvania, with which she is identified.

Dr. Anita Newcomb McGee, daughter of Prof. Simon Newcomb, was born in Washington, D. C., and received her early education in private schools in that city. Later she studied at Newnham College, Cambridge, England, the University of Geneva, Switzerland, and in Berlin. She has had the great advantage of extended travel and the acquaintance of many celebrated men.

Although only twenty-four years of age at the time of her marriage to W. J. McGee —then a member of the United States Geological Survey, though now chief of the Bureau of American Ethnology —Dr. McGee was interested in historical and genealogical research. After her marriage she studied medicine at Columbia University and Johns Hopkins Hospital, graduating in 1892.

Dr. McGee is a fellow of the American Association for the Advancement of Science and other well-known societies. She was surgeon-general of the National Society of the Daughters of the American Revolution.

During the recent war with Spain Dr. McGee rendered important services to the medical department of our army. Early in the war Surgeon-General Sternberg gave to a committee of the Daughters of the American Revolution, of which she was chairman, the responsibility of furnishing women nurses for the army, and much of the labor of deciding upon the fitness of candidates was performed by Dr. McGee personally. In connection with this work she was made a contract surgeon in the army with the rank of second lieutenant—the first woman to hold rank in the United States army.

Dr. McGee has written for scientific

journals; has also compiled and issued directories of the National Society of the Daughters of the American Revolution, for 1895–96; and lectured and also written on the communistic societies of the United States, in which she has taken much interest.

Madame Alice Le Plongeon has, with her husband, Dr. Le Plongeon, traveled and lived among the ruins of Yucatan. She was born in London, England, and lived there until after her marriage. She now resides in Brooklyn, N. Y. Besides her book on "Here and There in Yucatan," and numerous articles in the scientific and popular magazines, Madame Le Plongeon has recently completed a large work on "Yucatan Ancient and Modern."

MRS. ZELIA NUTTALL.

Mrs. Zelia Nuttall, honorary special assistant in the Peabody Museum of American Archeology and Ethnology, is of Irish-American descent on the paternal side and of Spanish-American on her mother's side, her native city being San Francisco, Cal. She studied in Paris, Germany, and Italy, and at Bedford College, London. Mrs. Nuttall has traveled extensively in Europe, Mexico, the West Indies, etc., and is an accomplished linguist. She has made a special study of the languages and antiquities of Mexico, including the ancient picture writings, and has given the public the benefit of her investigations in numerous papers which have appeared in scientific publications at home and abroad.

"A Preliminary Note on the Ancient Mexican Calendar System" was read by her in the presence of King Oscar II., at the Tenth International Congress of Americans held in Stockholm, 1894. Mrs. Nuttall had previously attended the American Congress at Huelva in Spain, where tables were exposed exhibiting her first reconstruction of the Mexican Calendar System. These were subsequently shown at the Historical Exhibition in Madrid and at the Columbian Exposition in Chicago, where she acted as judge of awards of Mexican and Central American archeology in the Department of Anthropology. In 1896 Mrs. Nuttall was entrusted with a scientific mission to Russia by the University of Pennsylvania and formed a large archeological and ethnological collection for its museum. In the course of Mrs. Nuttall's researches she discovered and identified several important relics of ancient Mexican pictography and feather-work.

Among other discoveries of note Mrs. Nuttall has brought to light an extremely valuable anonymous Hispano-Mexican manuscript preserved at the Biblioteca Nazionale Centrale of Florence, Italy, of which her publication in facsimile, with translation, notes, and commentary, is now in press and will appear under the title of "The Life of the Indians." The extent, value, and accuracy of Mrs. Nuttall's Mexican researches have been greatly enhanced by drawings made by her from the originals.

Mrs. Nuttall has been honored by numerous American and European societies, is a fellow of the American Association for the Advancement of Science, and a member of the leading scientific societies in the United States and other lands.

THE BARRYS.

BY SHAN BULLOCK.

CHAPTER I.

IT was a blustering day in early March, and, once quit of the bleak station and the noisy car-drivers assembled outside its porch, Frank Barry set his face quickly for Lismahee Street. He was cold, cramped, tired to death of his journey; it was glorious to have again the firm earth beneath his feet and the east wind on his cheek. What if he were hungry, unshaven, weary; what if a six miles Irish lay between him and rest; what if a memory of the pitiless sea, of the unutterable carriages and their distressful occupants, still haunted him like a nightmare? He was away at last. Six miles would hardly warm his blood. The longer the fast the gladder the feast. He set his face to the wind and strode like a giant.

He entered Lismahee; hurried along the broken sidewalk, past tradeless shops, gaunt white houses, and silent streets; turned to the right down an alley, went up past the workhouse and the churchyard; suddenly, on the top of a hill, found himself in the same moment well rid of Lismahee and well met of the country. It was great, the change from the narrowness and poverty of man to the breadth and bounty of nature. For a minute Frank hung on his heel, threw a look, part scornful, part pitiful, backward at the little town, let his eyes rest on the big ring of pines that lay beyond the huddled roofs, on the sweep of hills to right and left, on the loom of mountains far beyond and the flash of water near by; then with renewed vigor set on between the hedges down the long ferry road.

He crossed the railway, went up and down a hill or two; presently found the road running flat as a table through a region of bogs. Here was no ditch on either hand, or hedge or fence; just an open drain beyond the footpath, and beyond this again the rounded edge of the turf banks. For miles and miles the heather stretched, brown and stunted; the black water gleamed in ugly bog holes; this way and that ran the uneven cart tracks; not a figure moved on its face, not a bird hung over its gloom; like a place of desolation the bog stretched away to the roots of the hills, and over it the wind went howling, icy as from the frozen North.

With his collar round his ears and his head bent to the blast, Frank set his teeth, fixed his eyes on the road, and grimly plodded on; at last, after a mile or so, found himself once more in shelter of the hills and flanked on either side by the welcome hedges. The change was blessed. He felt like a ship in port, wind-swept and driven no longer. Warmth spread through his limbs, the blood flared in his cheeks; with his coat flapping, his pipe going, and at a slower step, he went on past the alder clumps, the rushy hills, the marshy flats; suddenly had sight of dark masses of trees, of long lines of shore and great stretches of water, and in a little while was standing beside Lough Erne on the pier of Garvagh ferry.

On this hand and that, as far as Frank could see, and in front of him about a mile in width, the lough lay cold and dreary beneath the low arch of a somber sky. A stony shore bordered it; up from it ran the bare fields and crooked hedges; above it the hills reared their barren crowns; here were belts of trees, there bleak patches of forest; in the distance a square tower stood out against the sky; far off was a range of mountains, nearer a great rock rose high above the water; about midway over an island, fringed with trees through which showed the front of a thatched cottage, lay in its loneliness; on the farther shore stood a rough stone pier, from which a continuation of the Lismahee road, you might fancy, went on and was lost in the gloom of a huddled plantation; everywhere was cheerlessness, loneliness, no sound but the rushing

of the wind and the flap of the waves, no life, no color, no beauty.

For a while Frank stood on the pier; then, having looked in vain for man or boat, turned and made for the little brick shelter which, its back to the ditch and its empty doorway to the road, stood beside a flagstaff some fifty yards or so back from the shore. The outside was naked, the inside gloomy. Round the walls were rough benches carved deep with the names and initials of thousands of rustics; the plaster was thick with penciled rimes, witticisms; near the door hung printed instructions for the guidance of any, be they strangers or locals, who wished to use the ferry. The charge for the conveyance of animals was so and so, of carts so and so, of passengers so and so; the ferryman lived on Inishrath Island (wherever on earth that might be, thought Frank Barry) and could always be summoned by hoisting the green flag which hung on the staff outside; *at night, however*, the directions ran on, *or in times of mist or fog, passengers must shout.*

Thanking his stars it was daylight, for not Boanerges might shout against the rush of the wind, Frank went out, ran up the flag, and sat him down on the edge of the pier to watch for the putting forth of the ferryman from Inishrath Island. Here and there he looked; above him the flag cracked and flapped; pitilessly the wind dashed its icy darts in his face. Before five minutes had gone he was curled on a bench in the shelter, feet tucked beneath his ulster, hands deep in his pockets, his back resting against a corner of the wall.

He lit his pipe; listened a while for the rattle of oars; presently closed his eyes and fell a-thinking. What a plight he was in, to be sure; sitting there solitary in the cold, waiting for a ferryman that might never come. Suppose they did not see the flag? Suppose night came and he had to shout? Oh, no use bothering; and, at the worst, he could be in no sorrier case than he had been all the day. Still, confound it, it was a poor way to come back to the home of his fathers. Home of his fathers? Ah, think of that! Across the lake there his ancestors had bled, fought, died; there his own father had lived during many years; there he himself had sported as a boy; there his uncle still lived, old Hugh, the last of the Irish Barrys. . . . Had he ever, as a lad, stood out there on the road shivering in the wind? He wondered. Somehow, he fancied he had. He seemed to remember things; not things but the shadows of them. Somehow, that long bleakness of road had not seemed unfamiliar; somehow, he seemed looking out even then on a familiar scene.

Anyhow there he was, back again in old Ireland, back after twenty, yes, more than twenty years. Twenty years of London; twenty years of moil and hardship in big, tyrannic London! Twenty years? Was he ever to succeed, ever have his due? Oh, confound that! He was there to have a good time of it, and, success or not, a good time he meant to have. . . . He liked Ireland. It was not the place of his dreams; no. Still, compare London with it. Think of a fog, and think of air such as that; compare the road he had walked with the greasy Strand, those hills, mountains, woods, the lake down there, the freshness, quietness of it all with London's square miles of roofs and belching chimneys, its ghastly rows of houses bordering interminable lengths of streets, its monstrous blocks of factories, schools, its mud, dirt, smoke! Still he liked London, loved it almost; yes, give it its due, he did love it. Curious that elasticity of the human mind, that adaptability of the human himself. In a fortnight, perhaps a week, he might be weary of his uncle, be longing for his den again, his books, his moiling; might be hungering for a talk with old Rab and a sight of his Marian. Marian? What an age it seemed since he saw her, an age crammed into the space of two nights and a day. Was she thinking of him just then, of their last talk, of their plans and promises? . . . What! that long, shrill cry? Oh, the ferryman no doubt.

Frank sprang from the bench, hurried from the shelter, and turned toward the lake; there, at the end of the pier, saw waiting one of those shallow, flat-bottomed boats

which in Ireland are called cots, and at the oars not a ferryman but a girl—a girl who sat with her feet crossed, body bent forward, and elbows resting upon the oars.

Like that she sat the while Frank, whistling softly to himself, and feeling the stress of the wind no longer, approached; sat quite still and watched him steadily as if seeing in him something novel or unexpected.

"Faith, and she's cool," muttered Frank; then, coming to the cot, "I'm for Garvagh," said he.

"Well," answered the girl, and pulling the handles of the oars from beneath the gunwales sat upright, "an' sure I was thinkin' that."

"You mean that you've answered the flag?" said Frank, "that you'll ferry me?"

"Surely. An' why not?"

"Ah." Frank paused a moment on the heels of the word. "And what am I to do?"

"Well," answered the girl with a smile, "I dunno; but usually people sit there," and she nodded toward the end of the cot.

"Yes?" said Frank. "I see. But—but I'd rather row. I'm not used to the honor of being ferried—I'd really like to row."

"Indeed an' so ye can," came back, "if you'll only jump in. But wait," said the girl, and crossing the oars again ran their handles beneath the gunwales; "wait till I pull the flag down. I'll not be a minute." And before Frank could offer his services, she was out of the cot and running up the pier.

He turned and watched her. She was of middle height and very upright. Her shoulders were broad, her head well poised; and she ran with the freedom and grace of a deer. She wore a brown linsey skirt, made quite simply, and not long enough to hide her heavy boots; and an old discolored jacket, too short in the sleeves and too long in the waist; a woolen scarf round her neck; and over her hair, which was gathered behind into a coarse black net, a man's tweed cap.

She was gone maybe a minute; and at sight of her running back along the pier, Frank stepped into the cot, turned, and with outstretched hand awaited her coming.

"Allow me," he said.

The girl stopped, looked at his hand, then at his face, then again at his hand.

"What?" said she, and met his eyes.

"Allow me to help you in," said Frank; but the girl flushed crimson.

"Aw, not at all; sure I'm young yet, thank God," said she; then sprang into the cot and catching up a pole fixed it in the stones of the pier. "Would ye be mindin'," she called over her shoulder, even as Frank dropped his hand and turned to stare after her; "would ye be mindin' to step this way a bit till I shove off?"

"Oh, certainly," said Frank in his sauvest voice. "Certainly." He turned, took a step or two; the next minute felt the cot slip away beneath his feet, clutched wildly at the air, and fell on his back.

It was ignominious, and below his breath Frank swore. He sat up, gripping the gunwales with both hands.

"Why—why the deuce didn't you warn me?" he called.

The girl turned and over her shoulder looked down at him; and seeing him, burst into laughter.

"Aw, Lord," she said. "Aw, Lord, Lord. Sure I didn't know. Sure I thought ye were used to boats. Sure . . . " Her laughter died away all suddenly. She pulled in the pole and came over the crutches toward Frank. "Mebbe you're hurt?" said she. "Are ye?" she said again and stooped.

"No," said Frank, "not physically hurt."

"An' how then?"

"I think you very cruel."

"Is it for laughin'? Och no. Aw, it isn't cruelty. Sure I was only—sure I couldn't help it. Sure we always laugh when any one falls like that. Aw, it wasn't cruelty," she affirmed pleadingly; then put out her hand. "Come, let me help ye up. You're sure, now, you're not hurt?"

"I'm quite sure," answered Frank.

"An' ye don't mind the laughin'?"

"Not a bit."

"Aw, that's good, that's good," said the girl; and without more ado turned to her oar.

Now Frank Barry was no waterman; and, though he tried hard to hide his ignorance under a fine show of vigor, and excused his bungling on the score of want of practice, fifty strokes of his were quite enough to convince him that, however well he might acquit himself on the wild reaches of the Serpentine, neither vigor nor excuses were of much avail against the stern onset of a pitiless nor'easter. It was ignominious again, but not to be helped; so, relinquishing his oar to the girl, he stepped to the end of the cot, sat down, and fell to studying the horizon. "Dern it," he kept muttering to himself, "dern the thing"; after a while, his natural good temper asserting itself again, turned his eyes and looked up at the girl.

With the handles of the sweeps crossed, her hands well apart and one higher than the other, her feet forward and pressed against a crutch, she was pulling strongly and steadily, each stroke long, hard, and well finished, the swing slow and regular, and every dip of the oars directed not so much to make headway as to keep the cot from drifting before the stress of the wind. The task was no light one, for the water was rough and the cot so shallow that continually it was trying to slew; but so skilful was she and so strong that only a slight flushing of the cheeks and a compressing of the lips betrayed her exertions.

Presently, however, she rested on her oars for a moment, quickly threw open the front of her jacket, tucked up her sleeves, and gave a tilt to her cap. And just then Frank had his first long look at her face.

It was oval in shape, very broad of the brow and cheeks, and curving down to a narrow chin. Her eyes were set well apart and were very dark. Her complexion was the rose and white of a child, and her hair fell away from her forehead in shining black waves. It was not a beautiful face, nor was it strong of feature or striking in outline; but it was a face to be remembered, if only for its look of frankness, its expression of sweetness and simplicity, its noble width of brow and glorious mingling of the hues of health and youth on lip and cheek.

For a while Frank Barry sat looking at the girl and her face, perhaps contrasting both with another girl and another face of his knowing; then leaned toward her.

"You row well," said he.

She glanced at him; then fixed her eyes on the point of her windward oar.

"An' so I ought," she answered, "for they say that practice makes perfect."

"You have a deal of practice, then?"

"Plenty; too much sometimes." Her voice was low and rich, beautifully modulated, Frank thought, and delightfully flavored with the brogue. "Other times I get less," said she, "but I can never complain."

"Yes," said Frank. "But surely you don't do all the ferrying yourself?"

"Aw, no, but I do some of it."

"And the remainder?"

"Aw, there's father an' mother, an' between us all we manage. On market days we all turn out; but other times it's just the one of us that sees the flag."

"And suppose no one saw it?" asked Frank, more for the sake of hearing her voice than for the sake of her answer.

"How could that be?" Again the girl glanced at him. "Sure we're none of us blind." The answer was plain, but not rudely given; and Frank kept on:

"Ah, yes. But you see a flag is a very small thing. To-day of course the wind kept it streaming at full length; but suppose the day was dead calm and a slight mist abroad, and suppose Inishrath Island were two miles off . . . "

"But it isn't," interrupted the girl, "for there it is," and she looked toward the island, which lies almost between shore and shore, and which just then the cot was passing. Frank looked at it, then at the girl, and laughed.

"I'm afraid I'm a noodle," said he.

"Aw, no," said she, and laughed also; "aw, no—only a stranger. Sure, we all make mistakes."

"And noodles create them," said Frank. "But come, now," he went on, "have pity upon me for the rest of this voyage. We've broken the ice at last; now be kind and

tell me something about yourself — your name and anything else you like. Come; and I promise to do as much for you."

Again the girl took her eyes from the white cottage which stood among the trees on the slope of Inishrath Island and looked down at Frank.

"Me name?" said she. "Sure, that's an easy matter when it's just plain Nan Butler."

"Ah. Nan Butler; just plain Nan Butler." Frank gave her a quick look. "Would you be very cross with me if I called you just Nan, plain Nan, and nothing else?" said he, and for his impertinence expected the saucy answer of a suburban miss. But Nan only eyed him wonderingly.

"Cross?" said she. "Arrah, what for?"

Frank smiled. "Oh," he said, "I only asked. I didn't know. I may call you Nan, then?"

"Well, indeed you may, an' welcome. Ivery one else does—an' why not you? But tell me now," said Nan, "for faith I'm dyin' to know, who are ye at all, at all?"

"You're dying to know?" Frank cocked his head.

"Faith, an' I just am."

"And why?"

"Why? Aw, just because I'm curious; just because the face of a stranger's as rare these parts as a full moon."

"Oh! It's not for myself you want to know then?"

"For yourself?" said Nan, again with that look of surprise. "Arrah, how could that be when I don't know ye?"

Frank gave in. Flirtation clearly was an unknown quantity with this lough-side maiden.

"My name is Barry," he said, "Frank Barry."

Nan hung on her oars.

"Barry?" cried she. "Barry. A relation, is it, of ould Hugh's of Ryfield?"

"His nephew."

Nan dipped her oars and rowed on.

"Oh, dear, oh, dear," she said plaintively, "to think o' that, to think o' me bein' all this time findin' out! An' you're all the way from London?" asked she.

"All the way—the weary way."

"An' you're the son o' Mr. George that left these parts years an' years ago?"

"Yes, Nan."

"An' you're goin' to the uncle's?"

"Yes, Nan."

"An' he doesn't expect ye? An' so there's no one to meet ye?"

"Quite right, Nan."

With her eyes on the point of an oar, Nan sat silent for a while; then:

"Oh, dear, oh, dear," she mused, "to think o' that, now—to think o' that!" Suddenly she looked at Frank.

"Why, sir, it's no stranger ye are, after all."

Frank laughed.

"And what then, Nan?"

"Aw, sure the son of a Barry 's as welcome these parts as a spring day. Sure every one'll remember ye. Aw, but father'll be glad to see ye, for it's often I've heard him tell o' ye. Often an' often."

They were nearing the Garvagh side; and Frank was sorry.

"So you think every one will be glad to see me?" he asked.

"Think? I'm certain sure of it."

"And you're glad, Nan?"

Frankly she looked at him.

"Glad? Why, to be sure I am. Is it you? One of our own, back again after all these years? Why, to be sure. Easy, sir," cried Nan, as the cot swung around to the landing-place, "easy, till she takes the quay. . . . There now, an' glad I am to see ye, Mr. Barry."

Frank rose.

"So it's like old friends we are, after all," he said, plucking at the fingers of his gloves.

Nan laughed softly.

"Faith, it seems so," said she.

"And I'll see you again?"

"'Deed, then, I hope so," answered Nan, and quite unwittingly evaded the meshes of Frank Barry's subtlety, "for if ye don't it's fair mad father'll be. Sure when I tell him you're here he'll be dancin' to see ye. Good-by to ye, sir, good-by. Aw, no," said she pleadingly, as Frank

came down the cot with the ferry money in his palm. "Aw, no, I couldn't take it. Is it from you? Don't ask me now. Don't."

"Well, then, shake hands, Nan."

"Aw, sure an' I will."

"And you'll let me hope to return your kindness, some day, won't you?" said Frank, Nan's hand in his.

"Aw, mebbe. Some day, mebbe."

Frank turned, walked down the cot and out upon the pier. Nan dipped her oars, pulled hard, and the cot glided off.

"Good-by to ye, sir," she called; "good-by, an' mind we'll be watchin' for ye."

"It's *au revoir* then, Nan," Frank waved his hand. "It's *au revoir*."

CHAPTER II.

FOR a while Frank Barry, on the wind-swept pier, stood looking after Nan; then turned, and, with his head down, went up the Garvagh road.

The way ran through an oak plantation, on between tall hedges and wide ditches, past cottages and pastures. On this side stood the mountains, on that the rounded hills. Below the gloomy sky lay a great gray-washed prospect; and through it went Frank Barry, along the broad white road, looking neither here nor there, and giving no heed to aught but the loose stones at his feet.

He felt pleased with himself, did Frank, glad he had come to this old distressful country. Something of a hero he felt as he walked; something of a throneless king, exiled through many years and now coming back to his own. "Sure the son of a Barry is as welcome these parts as a spring day." The words still rang in his ears; they pleased him. To think that people were waiting to welcome him, to make a hero of him—and all because he was a Barry, the son of his father, because he was himself! He had expected to be forgotten, gone out of sight and mind like an old tombstone. But no. All those years of his absence, people had been talking of his father, of him, keeping his memory green; keeping warm for him a welcome back that should be glorious as a spring day. Ah, he liked these faithful Irish hearts; so little they had in common with the phlegmatic English. He thanked heaven he was an Irishman, with the mad old blood of the Celts coursing in his veins. His soul, his patriotic soul, was burning with fine patriotism. He liked Ireland; loved its people. . . . That Nan, now. There was your true Irish colleen. What a face she had, so sweet and regular; what honest eyes, what frankness of manner; what a color of health on the tender bloom of her skin. How her native graces killed the rusticity of her ways, speech, garb; and what simplicity of character. As natural as a flower she was, and as simple; as sweet and fresh as the heather. Decidedly he liked Nan Butler. If girls such as she were plentiful among these barren hills, then diversion and he were likely to meet during the next week or so.

Suddenly Frank stopped short, wheeled about on the road, and stood looking here and there across the hedges; stood looking till his eye had singled out a white house standing some little way back among the firs on the crest of a hill. That was Ryfield. He knew it. In every way its appearance tallied with the description given him by the station master at Lismahee; without hesitation, then, he turned, came soon to a white gate, passed through it, and started along a lane that climbed laboriously through its lines of poplars and white-thorn hedges. On either hand the fields spread out, clean, level, well-tended; not a rush or whin took the eye; here were troughs and hayracks, there plows and harrows; an orchard faced the south, within shelter of the firs lay the haggard, right in front was a range of offices, with the lane running at last between stone pillars into the farmyard.

A little way from the pillars was an iron gate; through this Frank passed and along a graveled path which ended soon at the porch of Ryfield house. He mounted the step and knocked on the oaken door; then backed away a few paces and looked about him.

In front of the house was a lawn of

about ten acres, planted at top with firs and beeches and bounded by the lane hedge and a wire fence. On the right was a kitchen garden set with fruit trees; on the left a tumbled rockery, an empty flower bed, and a narrow paddock. The house itself was square, plain, high, and white-washed, set with tall windows and a narrow door; a serviceable building and an ugly; yes, thought Frank Barry, almost ferociously ugly. The whole place was unattractive; had a somber look, a prosaic air, that, somehow, hardly appealed to his fanciful eye. It looked prosperous, healthful; still, thought he, was it a likely place of sojourn for one of his susceptibilities? A whole six weeks or so, could he spend them just there? He shrugged his shoulders; then, wondering why no one came, turned and knocked again. And, even while his hand was raised, a foot sounded within, a bolt shot back, the door creaked open, and his Uncle Hugh stood before him.

A big man he was, muscular, slightly stooped; his face large, square, florid, his mouth wide and firm, his eyebrows bushy, his brow beetling and wrinkled. He wore a loose suit of brown tweed, brown leggings, and nailed boots. His spectacles were pushed up his forehead; round his neck was a knotted black scarf; a chain of white metal hung across his waistcoat; in his left hand a large Bible was closed over his thumb.

Hugh looked steadily at Frank for a moment; then jerked back his shoulders.

"Well," said he, in a strong, full voice.

Frank stepped forward; smiled, put out his hand.

"Don't you know me?" he said. Hugh pursed his lips, pulled down his spectacles, peered hard. "Don't you know me, Uncle Hugh?"

"Eh?" said the old man sharply. "What's that?"

"I'm your nephew, Frank—come from London to see you."

A light of recognition flashed in old Hugh's eyes; he made a stride forward and shot out his hand.

"Frank," he said; "Frank from London? Ah, I knew ye for a Barry; I knew ye but I wasn't sure. But come in, me boy; come in. Wait now." He closed the door and shot the bolt. "Wait now. Why, who'd ha' thought? Here, this way, this way," he called and led Frank through the hall up into a large parlor.

A well-worn carpet was on the floor; the walls were whitewashed and hung with prints in walnut frames; stout haircloth chairs and a couple of armchairs stood here and there; in the corner was an upright desk, and beside it whips, sticks, guns, fishing-rods; a clear fire of peat burned in the grate; on the table stood a tray bearing an empty cup and saucer, part of a soda cake, and a plate of butter.

Old Hugh shut the door, laid his Bible on the table, took Frank by the arm, and led him to the window.

"Let me look at ye," he said; "let me see if you're a real Barry." Long and steadily he made his survey; at last stood back at arm's length and shook Frank roughly. "Why," he said, "you're not half a Barry—not half. Your skin's like a woman's; there's no flesh on ye; you're soft, sir, flabby as fresh fish. Why, your mother was a better man than ye—ay, it's after her ye take your good looks." Frank stood flushing and biting his lip; again old Hugh shook him to and fro. "An' why don't ye hold up, sir, instead o' slouchin' like a beggarman? Come; straighten your back. That's right," said Hugh, as Frank, for a moment, got rid of his student's stoop; "that's right. An' now look me in the eyes. Ay, ay; you'll do. You're honest, Frank Barry, an' that's the great thing. Ay, that's the great thing," repeated the old man, then, much to Frank's relief, turned away, walked to the fire, sat down, leaned back in his big chair, and clasped his hands before him. "Ay, that's the great thing," he kept on. "But sit ye down, Frank Barry; sit ye down. An' why don't ye take off that coat? Take it off, man."

Frank walked to the table, laid his hat on a chair, and unbuttoned his ulster. The flush born of his uncle's survey had died away from his face; and now about the

corners of his mouth and in his eyes hovered the wraith of a smile.

"Yes, uncle," said he, and the smile widened. "But I do wish you had waited a while before taking stock of me. Man, I'm just famished. I haven't eaten a bite since yesterday."

Up shot Hugh from his chair.

"Hungry?" said he. "God bless my heart, of course ye are. Tut, tut." He crossed the room and opened the door. "Sally," he called, "I say, Sally; are ye there? Well, boil eggs—plenty of them; and fry some of that ham—lots of it; an' make toast, an' tay; an' bring a tablecloth an' the best things; an' be quick, Sally. Ye hear me? It's all I've got, my boy," said Hugh, closing the door and turning again to his chair, "but such as it is there'll be plenty, an' you're welcome to it, Frank, very welcome." He sat down. "An' now tell me how ye are, and how the world's using ye."

Frank was pretty well, he thanked his uncle, pretty well; no better and no worse than one expects of the average Londoner.

"Ay, ay," said Hugh, "well enough for a Londoner. Yes. Wi' your lungs like a chimney, an' not a sound tooth in ye, I warrant. London? Aw, I know it. A big unholy stink-pot—that's London."

Frank sat back in his chair and smilingly took note of this uncle of his. An interesting old boy he seemed to be, an uncommonly interesting old boy.

"Well," said he, "we won't quarrel there. But how are you, Uncle Hugh?"

Hugh turned his head.

"I? How am I? ye ask. How d'ye think I ought to be?" he questioned. "How d'ye think *you'd* be, livin' here on the side of a hill without chick or child of your own, an' wi' only a lump of a girl to care for ye? Eh?"

"I'm afraid," said Frank, with a shake of his head, "I'm afraid I'd soon get rid of my sooty lungs. I'd die most assuredly."

"Ay, you'd die," came back with a scornful snort; "faith would ye. But I don't die. No. Look at me. I'm up at six every morning; in the summer four o'clock doesn't see me in bed most times. Wet or fine, every day I make the round o' the land before I taste meat. I'm not in the house, barrin' meal-times, from sunrise to sunset. I'm nearer seventy nor sixty, an' I could ride from here to Lismahee, or walk or run. Ye hear me? Or run, I say. Is that like dyin'?"

"No, uncle."

"You'd die, of course," old Hugh went on, shooting out a forefinger, "because that's the kind o' ye. You're soft and womanish, like your father before ye. But I'm not that kind. No. Ye wouldn't find me shut up in any stink-pots; ye wouldn't find me thrivin' on soot an' watered milk an' foreign beef; ye wouldn't find me makin' the choice your father made an' goin' from my liberty, my fresh air, and . . . Ah, but I strove sore to keep him," said Hugh, sinking back in his chair and dropping his white head; "hard I strove. But go he'd go; an' now—now he's dead an' gone. Ay, sirs. Ah, poor George, poor George," moaned Hugh, with a sudden fall in his voice. "Ye died soon. My poor boy." He looked up at a portrait which hung over the mantelpiece—a faded photograph in a gilded frame. "There ye are," said Hugh. "There ye are, George. An' it's dead ye are."

For a while the old man sat looking up at the portrait; then, all at once, turned to Frank.

"You're like him," said he. "You're like him; an' I wouldn't wonder—Tell me," he asked abruptly, "do ye drink, Frank Barry?"

"No," said Frank, looking full at his uncle. "No," said he.

"Well, thank God for that." Hugh sat back in his chair. "Thank God for that." And before more could be said in came Sally with cloth and tray.

She was a middle-aged woman—for all that Hugh had called her a girl—short, stout, ugly, snub-nosed, yellow of skin, gifted with a perpetual sniff and a habit of peering short-sightedly at things from the tail of her eye. She spread the cloth, scattered the tea things about; was just about

to lift a dish of ham from the tray when said old Hugh:

"Don't ye know who this is, Sally?"

Hard Sally peered at Frank; sniffed and peered, peered and sniffed; at last shook her head.

"Well, sir, not a know I know."

"Phat, woman. Get your specs. Don't ye remember Mr. George?"

"Mr. George, sir? But sure—but sure —"

"That's his son sittin' there — Master Frank."

"Master Frank?" cried Sally. "Master Frank? Mr. George's son?" Quickly she put down the dish, rushed at Frank, and clutched his hand. "Why, sir; why, sir! Aw, but I'm glad to see ye. Welcim back, sir, welcim back to the ould country. Aw, the spit o' your father ye are. An' me not to know ye! Aw, welcim back, sir, welcim back. An' me nursed ye, an' minds ye a gossoon in skirts, an'—Aw, welcim back," cried Sally, and ceaselessly shook Frank's hand up and down. "An' how long are ye goin' to stay? An' how are ye? An' welcim back."

It was becoming embarrassing for Frank, pleased though he was at this quick confirmation of Nan Butler's words; mighty glad was he when, at last, old Hugh rose, took Sally by the shoulders, and turned her toward the door.

"Here, Sally; that's enough bleather for once in a way. Be quiet, woman. Don't ye see Mr. Frank's half starved? Not a word, I say." Hugh closed the door on Sally and turned toward his chair. "Dear me, dear me," he said, "the wheedlers these women are—the scandalous wheedlers." He sat down and pursed his lips. "Ay, it's wonderful the eye they have for the people that want them. 'Twas always the way—always. A Barry had only to show his face an' wag his finger to bring them flockin' to his feet like crows."

Frank looked up from his plate.

"Indeed?" said he.

"It's been the curse of us," mused Hugh, "the curse of us."

"Indeed?" said Frank again.

"Ay, indeed," answered Hugh, taking up his book. "But go on wi' your supper, Frank; maybe we'd have a chat when you're done. Where was I, now? Yes, yes. The tenth chapter of St. John's Gospel, the tenth chapter. . . ." And sitting back in his chair, his Bible on his knees, his finger following his eye over the page and his lips mumbling, old Hugh went on with his reading.

Frank sat in front of the fire and in full view of his father's portrait; and, as he ate, his eye kept wandering up and down, down and up, between the living face bending over the Bible and the dead face there on the wall. Between the two he could trace few points of resemblance. The one was strong, rough; the other showed small, refined, almost weak. His uncle's was the face of a man of action, of powerful will, of large but untutored intellect; in his father's he could see gentleness, culture, a refinement both of character and mind. Yes, and such a man clearly was old Hugh; and such a man, he knew, had been his father. . . . Ah, if only he had lived, lived to reap some reward of his labors! But London killed him before his time. His face was older than that, older and much sadder, before he died. No wonder either. He was a young man the day he left his village school and went to Dublin; he was a young man when, three years afterward, he went tracking fortune to London; he was an old man, five years later on, as he lay dying out in the wilds of Camberwell. Eight years of drudgery, five years of grim striving on the slippery ladder of journalism, five years in the harness of a hack, had done that; aged him, killed him. Yet he must have been happy, thought Frank, happy even as his son, despite all, was happy in his drudging. Ah, the curious mortals these men of letters were! Yes; he was his father's son. He had his cast of face, he knew he had; he had some of his father's abilities, sympathies, in point of character they were much alike. And one had failed—and died; and the other? Yes, thought Frank, and, his meal being over, leaned back in his chair; what of the other,

even of himself, Frank Barry? Ah, that was the question of questions, thought he; then, as was his wont when thought grew troublesome, rose and went for his pipe.

The smell of tobacco roused old Hugh. He put down his Bible, brought forth a black cutty, and lighted it with a coal. Sally came in and cleared the table—not without fresh shouts of welcome for Frank, either; lit the lamp, pulled down the blind, and put fresh turf on the fire. Frank went round the table, drew over an armchair, sat down, and stretched his legs toward the blaze. He felt satisfied, comfortable, in good humor. There were worse places than Ireland, he said to himself, and few anywhere more cozy than Ryfield parlor.

All at once Hugh turned.

"I'm glad to see ye in that chair, Frank," said he, his eyes lightening as he spoke. "Ye fill it well."

"Thank you, uncle," said Frank, and answered Hugh's look with a smile; "thank you, and may I never see you fill your own chair worse."

"Ay, ay." Again Hugh looked at Frank. "Ye like your ease I see."

"Well, yes. I like it; and when I can I take it."

"An' you're fond o' the pipe," Hugh went on, still with his eyes on Frank.

"I am; fond and faithful."

"I know." Hugh paused. "Ye said, I believe, that ye didn't drink?"

"I said so," replied Frank, a little stiffly. "Why ask me again?"

"It's a curse," cried Hugh, "a curse. It's ruined more men o' my knowin' than'd fill a churchyard. Keep from it," he cried, and glanced up at the portrait, "as ye'd keep from the plague. It's a curse."

Frank sat silent. He set up for no saint; his uncle was right no doubt; still he resented this suspicious questioning.

"It's a curse," repeated the old man, "a curse. Drink and the false smiles o' women, there's what the Barrys had always to fear. Keep from them, Frank; keep from them. Ah, George, George," said he, and again looked up at the portrait. "Only for them you'd ha' been alive now, me son. Women and drink, they killed ye, George, they killed ye."

Frank pulled his legs and bent forward.

"I wish you'd explain, Uncle Hugh," said he. "I don't know what you mean. I know what you mean by—What woman do you refer to?"

"Mean?" Hugh looked at Frank over his shoulder. "I mean this: that from the time your father was the height of a cart-wheel he'd drink whisky wi' all the world, an' he'd go ten miles to see a girl. That's what I mean. He was clever—ay, cleverer than the lot of us together, but he had that weak jaw o' yours, an' always a woman could wheedle him. He had no backbone; no grit; he was a fly-away, a gad-about. Nothin' would satisfy him. Give him the sun, and he'd want the moon. He squandered his wits, scattered his brains, killed the poor life in him. He married at twenty, an' he repented at twenty-one. No sooner was he settled here than off he goes to Dublin; he wasn't in Dublin till his eyes were turned to London. An' to London he went. Ay. That was the end of him; big, dirty London finished him. . . . An' now he's gone; an' Tom's lyin' dead in the States; an' Henry's a corpse in Australia; an' Fred's lyin' over there in Derryhill churchyard—all gone," mused Hugh, "all gone. An' with all," said he, in a while, "with all 'twas the same—wheedlin' an' drink, wheedlin' an' drink."

Frank leaned back in his chair.

"For all that," said he, "I think you'll admit that my father was a very good fellow. He is not forgotten even now, I think, in these parts."

"He was a great sight too good a fellow, Frank Barry," said Hugh sharply, "a great sight." And to that Frank did not reply.

There came a short silence; then, once more, Hugh turned in his abrupt way.

"You'll have a girl in London, I warrant?" said he.

"I have," answered Frank shortly.

"Ay? I thought so. I thought so. You wouldn't be a Barry if ye hadn't. Maybe it's married ye are?"

"No."

"H'm. Not yet; not yet. An' what might be her name?"

"Marian."

"Marian what?"

"Marian Dent."

"Ay. Marian Dent; Marian Dent. Just so," mumbled Hugh and wagged his chin up and down.

Frank was getting used to his uncle's manner, beginning even to find it amusing. He was a character evidently, was this old Hugh; a man worth humoring; a rich harvest, maybe, for the sickle of your cunning man of letters. He seemed a wise old fellow, if a crotchety; he was delightfully unconventional; his talk bristled with the unexpected; he was rough, perhaps a little rude: yes, he was worthy the studying. To the studying then fell Frank, a fresh pipe going smoothly, and himself in the depths of an easy-chair.

For a while Hugh sat mumbling to himself; all at once straightened his shoulders, put a fresh coal in his pipe, and turned again to Frank.

"An' what brought ye over?" he asked.

"To Ireland, you mean, uncle?"

"I do."

"Well, I came in a steamer, uncle—"

"Come, come, sir," shouted Hugh, "none o' this foolery. I hate jests. Come, answer me."

Frank answered softly:

"Well, I came to see you, Uncle Hugh."

The fire died in the old man's eyes.

"To see me?" he said. "Is that true, Frank? It is. Well, God bless ye for it; an' it's glad I am to see ye. Ay; mighty glad I am. An'—but ye came for something besides that, maybe?" asked Hugh suddenly.

Frank was in a difficulty. He had told only half the truth. He did not wish to hurt the old man's feelings, could not withdraw his words, had no wish to commit himself further; he evaded the difficulty by saying that wherever he went, even when seeing a friend, he always carried his work with him. He and his work were twins, inseparables, each ever and always in and for the other. Hugh looked at him.

"Ay?" said he. "An' what may this great work o' yours be, may I ask?"

"I write," answered Frank, not humbly. "My work is literature."

"Write? Write? An' what d'ye write?

Frank shifted nervously in his chair; made answer that he wrote many things: articles for the newspapers, stories for the magazines, a little verse, occasional paragraphs, many and various things.

"An' that's how ye earn your livin'?" asked Hugh.

"That's how," answered Frank.

"Scribblin' your wits away for the papers?"

"If you like to put it like that."

Hugh raised his hands and brought them down heavily on the arms of his chair.

"Ah, you're your father's son, Frank Barry," he cried; "your father's son. My God, hadn't ye his example? Scribblin' your wits away! An' that's all ye do?"

"That's all. Is it not enough?" asked Frank, and smiled in his superior way.

"Enough? Too much, be the Lord! An' ye mean to keep at it?"

"Please God."

Again Hugh raised his hands. His thoughts were beyond words.

"An' what, may I ask, will ye find in these parts to scribble about?" he asked after a pause.

Again Frank shifted uneasily; replied that he meant to write a novel, that he was seeking material therefor, that he hoped to find it in plenty in dear old Ireland.

Hugh groaned.

"A novel?" he mumbled. "A novel! A bundle of lies, a kill-time for women and children. Lord, Lord!" he said; then quickly swung round in his chair and crashed his hand down on the Bible. "Let me tell ye this, Frank Barry," he said, bending his brows on the young man, "an' may it do ye good: All the writin' the world wants was done long ago, and all the readin' the world wants is there." He slapped the Bible. "I'm an old man, an' comin' near me grave; I've lived most o' me life an' I've had me share of its experience: an' here I am tellin' ye that all ye can't

find in these pages is stuff an' nonsense, sir; wind and bleather, sir. I never thought of anything I couldn't find there, an' I never wanted anything I couldn't find in it; it's the one book in the world, and the only one there'll ever be. I've read it every day these fifty years; an' yet I don't know it. I never open it but I find something new. It's the one book in the world, I tell ye: an' yet you, you'd write another, an' fools like you are always writin' them, an' other fools always readin' them! An' what better are you or they, I ask ye, for all your nonsense?"

"Very little," answered Frank. "Really, uncle, I don't disagree with you."

"Disagree? Then why do you do it? Why do ye addle your brains wi' such stuff? Tell me this, Frank Barry," said Hugh, leaning forward in his chair. "How often do you read your Bible?"

The look of amusement which Hugh's outburst had brought died away in Frank's eyes; nervously he crossed and uncrossed his legs.

"Answer me, sir."

"Well, honestly, uncle, I fear not very often."

"Ah, I thought so; I thought so. An' how many other books would ye read in the year, now?"

"Really I don't know; perhaps hundreds."

"Hundreds," cried Hugh, throwing up his hands. "Hundreds!" It was too much. For a while he sat pondering and mumbling; then slowly turned, took up his Bible, and pulled down his spectacles. "It's time for bed," said he, "but I'll read ye somethin' before ye go. It's a story I have a likin' for; an' maybe ye never heard it, and maybe it may tell ye somethin'. Ay, ay." He turned the pages; presently drew over the lamp, and began reading the parable of the Prodigal Son. Slowly, emphatically he read, as though weighing each word; clearly his voice rang through the room; steadily his fingers followed the words along and down the page; ceaselessly his white head moved in rhythm with the sounding sentences. At last he finished, closed the book, folded his spectacles, slowly rose. "I always think that a grand parable," he said; "a grand parable. It's all truth, it's powerful human; an' one needn't be past sixty to be able to apply it." He held out his hand. "Good-night, Frank, an' God bless ye, my son."

(To be continued.)

THE CONSTITUENTS OF THE ATMOSPHERE.

BY A. DASTRE.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE FRENCH "REVUE DES DEUX MONDES."

OUR knowledge relative to the composition of the atmosphere has been developed unceasingly since the end of the last century. It has been recently enriched by the discovery of the new gases, argon, krypton, neon, metargon, which are at the same time new, simple substances. This chapter of chemistry has a long history already. It opens with the discovery of nitrogen in 1872 by William Scheele and the discovery of oxygen in 1774 by J. Priestley. It was Lavoisier who made the true nature of these gases understood, gave them the simple names they have retained, and determined the composition of the atmosphere, which he considered formed of a mixture of five sixths nitrogen with one sixth oxygen. The more recent determinations of Mr. A. Leduc in 1896 have substituted for these approximate numbers the more exact and probably decisive figures of 78.06 parts of nitrogen and 21 parts of oxygen in volume.

But aside from these fundamental elements, oxygen and nitrogen, which form its principal mass, there are found in the atmosphere, where are scattered all the gases and vapors escaped from the depth and the

surface of the soil and waters, certain accessory elements. The efforts of chemists during the course of this century have been applied to the study of these superadded elements, secondary and minute in proportion, which is not saying that they are in importance, and whose existence is at the same time constant and universal. They are water vapor, carbonic acid, ozone, and ammonia. Outside of these permanent materials, there are some whose presence, although very general, is considered accidental, such as carbonic oxide, formene, sulphureted hydrogen, iodine, nitrous acid, etc.

The principal work of contemporary chemistry, as concerns the atmosphere, has consisted in making known the presence, the proportions, and the variations of these constituents. It is to this category of accessory components of the atmosphere that the new gases discovered since 1894 by Lord Rayleigh and Mr. W. Ramsay belong.

Another problem which has preoccupied chemists in the course of this century is that of knowing if the composition of the atmosphere is invariable, and after many experiments they have agreed that it is, relatively speaking, of fixed composition. That is, during the last hundred years during which experiments have been made, it has not varied materially.

If one reflects on the origin of atmospheric oxygen, he finds himself in presence of two contrary hypotheses. The first consists in admitting that the oxygen of the air is the residue of that which already existed in a free state at the epoch when the earth was still a mass of incandescent fluid.

A second and quite contrary hypothesis has been proposed in these last years by Mr. T. L. Phipson. According to his theory, the major part of the oxygen is of recent formation—in relation to the other gases of the air. The primitive atmosphere was composed essentially of nitrogen, carbonic acid, and water vapor. It is in such a medium that vegetable life appeared. The first plants, essentially anaerobia, decomposed the carbonic acid under the influence of the solar rays, while they poured oxygen continually and gradually into the aerial medium. The anaerobic cell, accommodating itself to this new medium, became slowly aerobic, and animal life was able to develop in its turn. After that, atmospheric oxygen went on increasing without ceasing on the surface of the globe. The present equilibrium is not, then, a true equilibrium, but a slow derangement.

Inversely to the case of oxygen, the presence of free nitrogen in the aerial medium and its almost indefinite conservation gives rise to no difficulty, since this gas is one of the most inert and least easy to liquefy.

Nevertheless the quantity of nitrogen is not invariable either, as these too simple views of its pretended chemical inertia would tend to make it appear. There exist several natural causes which tend to diminish unceasingly the stock of free nitrogen; first among these the formation of nitric and nitrous compounds in the air under the influence of atmospheric electricity. Then, too, clayey soils, owing to the microscopic organisms they enclose, incessantly subtract this gas from the atmosphere. This subtraction reaches enormous proportions in soils where leguminous plants are cultivated; not that these vegetables have in themselves the faculty of absorbing the nitrogen directly, but because their roots give an asylum to innumerable multitudes of those microbes of the soil which possess this faculty.

It is apparent from these explanations that the composition of the atmosphere, in place of being fixed, evolves slowly toward a state of things characterized by the decrease of nitrogen and the increase of oxygen.

If we lay aside now the two fundamental elements of the air, in order to come back to the accessory elements, we will see that they have been the occasion in these last years of researches not less interesting.

This is especially true of carbonic acid, which is much the most important of the variable elements of the atmosphere. The quantity of carbonic acid oscillates about three ten-thousandths. Ten cubic meters of air contain about three liters of it. One

may be justly astonished to see the proportions of this gas maintained almost invariable when so many circumstances concur to make it vary. Green plants absorb considerable quantities of it which they decompose, throwing the oxygen from it back into the atmosphere. The most recent theory on the subject, that of Hoppe-Seyler in 1877, estimates that in one hundred and twenty-nine years this cause would exhaust the carbonic acid from the air if powerful sources did not renew the subtracted gas. The most common of these sources are the respiration of living beings, the slow decomposition of organic residues, the combustion of enormous quantities of coal, the disengagement of gas by volcanoes. There is yet another source—inexhaustible, so to speak—the waters of the sea, which contain in a state of bicarbonate of lime immense reserves of gas which Mr. Schlœsing has valued at about ten times the total quantity contained in the atmosphere.

Compensation between the gains and losses of this gas is established by a sort of regulating mechanism acting automatically. This is formed by the carbonic acid stored in the fresh waters and especially in the waters of the sea in the state of bicarbonate of lime. When the carbonic acid tends to diminish in the atmosphere, the bicarbonate is dissociated into carbonate, which settles, and carbonic acid, which becomes free. Inversely, if the gas is in excess, its pressure exceeding the tension of dissociation, one part reenters into combination with the carbonate and regenerates the bicarbonate until the excess has disappeared. This game of seesaw, ruled by the laws of dissociation, assures the almost perfect constancy of the proportion of carbonic acid.

But here it is well to remark that the equilibrium is one relative to present circumstances and ceases to be true if the extreme past or the extreme future is considered.

It is not to be doubted that at its origin the atmosphere contained enormous quantities of carbonic acid. In measure as the terrestrial globe cooled, the carbonic acid, primitively free, was successively subtracted, combined, and immobilized in the calcareous rocks.

In its evolution the globe tends always toward cooling. It is advancing, therefore, in a fatal manner to the exhaustion of its reserves of free carbonic acid, that is to say, toward the extinction of life, since carbonic acid is the aliment of the vegetable and that in its turn the aliment of the animal.

However this pessimistic perspective may be, let us remember that nitrogen and carbonic acid tend to diminish without ceasing in the atmosphere, while oxygen tends to increase continually up to a certain limit.

We have said that the work of contemporary chemistry as concerns the atmosphere was double. It has studied attentively the variations of the fundamental gases and of carbonic acid. In the second place it has sought with patience the accessory elements, water vapor, ozone, ammonia, and the other gases and vapors and different dusts that are here encountered.

Water vapor offers considerable interest from the standpoint of general physics and the physics of the globe. It forms, as it were, a mantle which protects the globe against cooling off, while permitting the partial absorption of the calorific rays emanating from the sun or from the earth. In France the quantity of water vapor varies according to circumstances between one and thirty-two grams to the cubic meter. Thus water vapor exists only in the proportion of a few thousandths, and its variations are in relation to the geographic situation of the place, the altitude, seasons, and temperature.

Ozone, which is a sort of condensed and active oxygen, exists in the atmosphere in very small proportions. Quantity and weight at the observatory of Montsouris, France, varied from day to day in the course of the year 1895 from four tenths milligrams to four and one tenth milligrams for one hundred thousand liters of air.

Ammonia exists in the air, not as a free vapor, but as ammoniacal salts, carbonate, nitrate, nitrite, solid bodies, maintained in the

air only in the form of floating dust. Its origin is twofold; it is engendered at the moment of tempests by the electric spark traversing the moist air and it comes also from the fermentation and putrefaction of all nitrogenous matter. The proportion in which it exists is about the same as for the preceding elements, one hundred thousand cubic meters of air containing on an average one and five tenths milligrams.

The other gases or vapors may be regarded as defilers of air; carbonic oxide is encountered accidentally in the vicinity of inhabited places, formene is found near marshes, sulphurous acid in the neighborhood of volcanoes, sulphureted hydrogen is disengaged from deposits of organic matters, iodine has very frequently been found in the air and in rain water.

The gases of which it remains to speak have not this character of defiler or accidental element. They do not spring from compounds which exist on the surface, but, on the contrary, they constitute the most ancient and special elements of the gaseous medium. Finally, in place of participating in the constitution of the atmosphere in the minute proportions of the preceding, they, when reckoned together, form nearly a hundredth part of the atmosphere, that is to say, they are a hundred or a thousand times more abundant.

The discovery of the new element of air, argon, was announced by Lord Rayleigh and Mr. Ramsay at the congress of the British Association held at Oxford in August, 1894. The gas they had obtained was heavier than nitrogen and more soluble in water. From the chemical standpoint its characteristic was its profound inertia. Nitrogen was considered the substance most refractory to chemical reactions; argon is more so. While nitrogen has been successfully combined with oxygen by means of the electric current, and while at red heat it can be fixed upon magnesium and other substances, nothing of the sort is possible with argon. It resists everything, or lacks little of it.

The fact that argon is a substance extremely indifferent and that it is mixed in the air with nitrogen, which is only a little less so, explains our long ignorance in regard to it. All the difficulty of its discovery consisted precisely in separating and isolating it.

On the other hand, argon is not at all a negligible factor of the atmosphere, since it exists there in a quantity about three times as great as water vapor, thirty to a hundred times as great as carbonic acid, and several hundred times as great as other factors, such as ozone and ammonia.

In fact, in all the analyses of air the part which remains after the other gases or vapors have been absorbed has, up to this time, been counted as nitrogen. It is this residue, which has escaped all reactions, which constitutes what is called atmospheric nitrogen. This residue is composed, as Messrs. Rayleigh and Ramsay have recently taught us, of eighty-three parts of true nitrogen and one part of argon. Two forms of nitrogen are therefore known, chemical nitrogen, a gas really pure, extracted from the nitrogenous salts, and atmospheric nitrogen, extracted from the air. If the attempt is made to combine atmospheric nitrogen it will not succeed completely, there will remain a residue, that is to say, a substance which by that very fact is distinguished from nitrogen. Argon will have been discovered and prepared. That is what was done by Lord Rayleigh and Mr. Ramsay.

It is true that some time before the illustrious English chemist and physicist Lord Henry Cavendish had succeeded in preparing argon, but as the work of Messrs. Rayleigh and Ramsay was carried further than his, we will consider it at greater length.

The initiative of the research of the two English savants belongs to Lord Rayleigh. He himself has said, "The discovery of argon is the triumph of the third decimal." In measuring the densities of atmospheric nitrogen and chemical nitrogen, he came to this singular result, that these densities were not the same. Chemical nitrogen, the gas extracted from nitrogen compounds, weighs 1.2505 grains per liter; atmospheric nitrogen, that is to say the gas which

remains as a residue of the air after the successive absorption of all the known elements, weighs 1.2572 grains per liter. It is a difference of about seven milligrams, that is to say, a difference which commences with the third decimal.

This difference astonished Lord Rayleigh. Doubtless it could be explained by supposing atmospheric nitrogen formed by the mixture with pure nitrogen, with the light chemical nitrogen, of a gas heavier than itself, but the supposition of this unknown gas was too contrary to the ruling opinion to be adopted at once. Before that, he must assure himself that no other explanation exists; he must turn to other chemists and ask their advice, and it is in this way doubtless that arose that association with Mr. Ramsay which proved so fertile.

The chemists that he consulted regarding the causes of this anomaly in the density of nitrogen replied that it was doubtless due to the fact that the molecule of nitrogen became dissociated in some of the phases of its preparation and that the result had been a diminution of its density. After various experiments Lord Rayleigh became convinced that this was not the true explanation of the phenomenon. Chemistry suggests a second hypothesis, the opposite of the preceding. Perhaps the atmospheric nitrogen was the condensed nitrogen, while the chemical nitrogen was the simple diatomic nitrogen. But this explanation Lord Rayleigh rejected after due investigation.

Logically the relative heaviness of atmospheric nitrogen in comparison with chemical nitrogen would be explained equally well if a gas lighter than pure nitrogen were mixed with the chemical nitrogen and lowered its weight, or if a gas heavier than pure nitrogen were mixed with the atmospheric nitrogen and elevated its density. The first supposition is impossible, since the nitrogenous compounds furnishing the chemical nitrogen were perfectly definite and crystallized. This final conclusion must then be accepted: atmospheric nitrogen contains, mixed with pure nitrogen, that is, with chemical nitrogen, a gas heavier than itself.

Argon had now a necessary, a logical existence. It must now be obtained in reality, prepared, and isolated.

It is here the English savants took up the experiment of Cavendish, while surrounding it with all the precautions and applying to it all the perfections permitted by the development of scientific resources at an interval of a hundred years. They made the electric current pass into a receiver where the atmospheric air (seven liters) was successively increased by new quantities of pure oxygen (to the amount of nine liters) in the presence of an alkali. The oxygen combines with the nitrogen; it forms vapors which are dissolved in the potassium. Thus chemical nitrogen disappeared from the air first employed. This absorption of chemical nitrogen was made three times as quickly as in the experiment of Cavendish. After seven days of the uninterrupted passage of a current of 2,400 volts the English savants obtained an irreducible residue of sixty-five cubic centimeters. It was the new gas, absolutely deprived of nitrogen, as could be determined by spectral examination, pure argon in reality and in substance; or, to speak with a prudence which the result has shown necessary, the residue was a new gas or a mixture of new gases—it contains in reality, besides argon, krypton, metargon, and neon.

The result was reached, the new gas had been obtained, the new gas or the mixture of unknown gases. The first part of the task was finished.

But another task almost as arduous was offered at once to the experimenters, that of determining the physical and chemical properties of the new, simple substance.

HISTORY AS IT IS MADE.*

War Inquiry Commission.

President McKinley has secured the services of nine men to investigate the conduct of the war with Spain, concerning which so much severe criticism was made in many quarters. The composition of this commission does not wholly satisfy the critics, who point out that one commissioner has, since his appointment, openly declared that most of the criticisms of the War Department were "rot"; that another commissioner may be prejudiced because of the appointment of one of his relatives to military service in the war, and that a third holds office in a branch of the War Department, which, however, has not been criticized. Nevertheless, the sessions of the commission have begun to bring out testimony from the chief military commanders who served in the war to the general effect that reports of suffering, poor food, and deficient medical attendance were much exaggerated.

Without exception all the members of the commission have seen military service. Maj.-Gen. Grenville M. Dodge, chairman, is a civil engineer by profession. He rose from captain to major-general in the Civil War; commanded the sixteenth corps in the Atlanta campaign, and the department of Missouri in 1864. In 1865 he commanded an Indian campaign, but he left the army the next year to build the Union Pacific and Texas Pacific Railroads. He has been congressman from Iowa, and is now commander of the Loyal Legion for the state of New York. Maj.-Gen. Alexander McDowell McCook is a graduate of West Point, with a distinguished Civil War record, and he served in the regular army from

THE WAR INQUIRY COMMISSION.

* This department, together with the book "Europe in the Nineteenth Century," constitutes the special C. L. S. C. course Current History, for the reading of which a seal is given.

1866 to 1895. Brig.-Gen. John M. Wilson, chief of engineers U. S. A., is a West Point graduate, and he served as inspector-general in the Civil War. Gen. James A. Beaver, ex-governor of Pennsylvania, served with great distinction in the Civil War, leaving the service after he had lost a leg. Col. James A. Sexton, of Chicago, is a veteran

THE LATE MISS WINNIE DAVIS.

of the Civil War and was recently elected commander-in-chief of the Grand Army of the Republic. Col. Charles Denby, of Indiana, attained his rank in the Civil War, and held the post of American minister to China from 1885 to 1898. Capt. E. P. Howell served in the Confederate army and is widely known in connection with the proprietorship of the *Atlanta Constitution*. Urban A. Woodbury, ex-governor of Vermont, is also a veteran of the Civil War. The seventh member of the commission is Dr. Phineas S. Connor, of Ohio, who was assistant surgeon and brevet major in the medical service of the Civil War for four years.

Casualties of the War.

The total loss of life suffered by the navy during the war with Spain was eighty-four, seventeen men killed and sixty-seven wounded. Deaths from all causes in the army between May 1 and September 30, inclusive, as reported to the adjutant-general's office, were: killed, 23 officers, 257 enlisted men; died of wounds, 4 officers, 61 enlisted men; died of disease, 80 officers, 2,485 enlisted men—an aggregate of 2,910 casualties, which the War Department says, in its statement including all the men who served in campaigns or remained in camps (274,717 in number), constitutes a percentage of loss amounting to 1.059.

In providing for medical treatment in the army toward the close of active hostilities, a departure of note was made by commissioning a woman, Dr. Anita Newcomb McGee, as an acting assistant surgeon, with the rank and pay of a second lieutenant. Dr. McGee is the wife of W. J. McGee, who has charge of the Bureau of Ethnology at Washington. Her commission is for a limited period, subject to renewal, and she has offices in the army building, New York City. Her uniform is that of a regular officer, with jacket, shoulder straps, etc., and a skirt of army cloth.

Columbus' Ashes.—The Maria Teresa.

Incidental to the closing of the war, sentimental interest attaches to two events. The Spanish authorities in Cuba, with ceremonial show of secrecy, have disinterred the remains of Christopher Columbus for the purpose of removal from Havana to Spain. The urn supposed to contain his ashes had rested in a niche of the cathedral since 1796. Since 1892 the spot has been marked by a slab bearing in relief a bust of the discoverer, and after the four hundredth anniversary of the discovery of the new world a mausoleum was erected in the center aisle of the cathedral. By Spanish legislation at Madrid, the Cuban budget included an appropriation for a monument, which will, however, if ever erected, now rise in Spain, not Cuba. It might be questioned whether Columbus, if he could be consulted, would not choose to have his dust lie in his native Italy, rather than the land which persecuted him in his old age, and international lawyers question the legal right of Spain, under the terms of peace-making, to remove his ashes without consulting either the United States or the Cubans. Moreover, historical documents

in the foreign office at Berlin show that, in accordance with Columbus' wish, he was buried in Santo Domingo, on one side of a cathedral altar, his brother being buried on the other, and, according to these records, it was proved as late as 1891 that Columbus' bones still lie there, the Spanish authorities having taken those of his brother to Havana by mistake.

There is no possibility of mistake, however, about the raising of one of the Spanish cruisers of Admiral Cervera's sunken fleet by Lieutenant Hobson, a feat of marine engineering which touches American sentiment. The hero of the *Merrimac* has added to his credit the recovery of the *Maria Teresa*, which will become a part of our own navy and retain her original name as a matter of sentiment. It is reported that the

WILFORD WOODRUFF.
Late President of the Mormon Church.

armament which has already been recovered from the wrecks of four Spanish cruisers off Santiago is valued at $300,000, and Lieutenant Hobson is confident that he will be able to save the *Cristobal Colon*, and also the *Reina Mercedes*, which was sunk by the Spaniards to obstruct the harbor. Apropos the multiplied evidences of the efficiency of our navy, the Navy Department has taken steps to reorganize the old system of promotions and rewards for merit in the navy.

Winnie Davis. No more striking evidence of the passing of bitterness between the North and the South has been brought to view than circumstances connected with the funeral of the late Miss Winnie Davis, familiarly styled the "Daughter of the Confederacy." This title was conferred upon her by Gen. John B. Gordon, one of the Confederate veterans who has been serving with the troops enlisted for the war with Spain. Miss Davis had refused an offer of marriage in order to maintain the name of her father, the late president of the Confederacy, using for herself the full name of Varina Anne Jefferson Davis. She was born in the "White House" at Richmond, the capital of the Confederacy, and, in later years, was a close companion of her father. She gave herself to literary pursuits, but was cut off in the thirty-fourth year of her age. At Narragansett Pier, R. I., her mother accepted an escort for the remains offered by the local post of the Grand Army of the Republic, and the impressive ceremonies connected with her interment by her father's side were conducted by the Confederate veterans at Richmond, Va.

Elections in 1898. Midway between presidential elections, an unusual number of important political contests occur in this year 1898. A House of Representatives, one third of the membership of the United States Senate, twenty-eight governorships of states, and other offices in some thirty-six states, depend upon the results. Republicans gained in the early election in Oregon. The Republican vote fell off in Vermont and Maine. In Alabama, Arkansas, and Georgia, Democratic majorities have apparently absorbed the greater part of the Populist vote. Other states will vote this month, and wide interest has been manifest in the various platforms and the *personnel* of state tickets. A study of state platforms shows that both parties have been loath to make clear-cut demands on the subject of "imperialism" so-called, although there are more Republican than Democratic platforms which advocate expansion. On the

currency question Democratic platforms in New York, New Jersey, and Connecticut declined to specifically indorse free coinage at sixteen to one. Yet the national machinery of the Democratic party is in the hands of representatives of the state organizations adhering to the Chicago platform. Advanced advocacy of the gold standard has been proclaimed by several Republican state conventions, notably Iowa, Connecticut, and Massachusetts. Two of the most interesting campaigns are furnished by New York and Pennsylvania. In the former Col. Theodore Roosevelt, of the "Rough Riders," is the regular Republican candidate for governor against Augustus Van Wyck, a Brooklyn judge and brother of Mayor Van Wyck of New York City. In Pennsylvania a three-cornered fight for governor, also involving Senator Quay's seat in the United States Senate, is waged between Col. William A. Stone (Republican, ex-congressman), George A. Jenks (Democrat, ex-solicitor-general under President Cleveland), and Rev. Silas C. Swallow (Prohibition-Independent). "Middle-of-the-Road" Populists, in their opposition to the policy of fusion, have already nominated a presidential ticket for 1900, consisting of Wharton Barker, editor of *The American*, Philadelphia, for president, and Ignatius Donnelly, of Minnesota, for vice-president. The "National" or "Sound Money" Democracy of 1896 has practically disappeared in the present campaign, Chairman Bynum having resigned his office to cooperate with Republicans, although a national executive committee is still maintained.

EARL OF MINTO.
Governor-General of Canada.

The Mormon Church. The status of Mormonism in the United States has been projected into public discussion by a recent change in the head of the church. President Wilford Woodruff died on September 1, having served at the head of the "Church of Jesus Christ of Latter Day Saints" since 1887. He was born in Connecticut, ordained for the priesthood in the Mormon Church in 1833; became one of the twelve apostles with the special title of "Banner of the Gospel," and traveled extensively in this country and Europe as a missionary. In 1890 he professed to have received a revelation abolishing polygamy. He was a member of the legislature of Utah for about twenty-five years. His successor is Lorenzo Snow, a native of Ohio, graduate of Oberlin College, and, like his predecessor, one of those apostles who accompanied Brigham Young to Utah in 1849. In August last the Presbytery of Utah formally charged the Mormon Church with returning to politics for the purpose of reestablishing church control of the state government. It is said that a Mormon manifesto has been issued regarding elections, and that the Mormons have determined to control the schools and to "live their religion," polygamy included. The Presbytery asserts that there are now more than 2,000 polygamous marriages in Utah, and that more than 1,000 children have been born of such marriages since January 4, 1896, when statehood was recognized. The Mormon Church is also charged with assuming political despotism to secure the lax enforcement of laws

against polygamy and to propagate the faith with renewed vigor. The charges are strenuously denied in the Mormon press, which asserts that since 1890 a polygamous marriage has not occurred in Utah and that the practice is slowly burying itself, according to the prevailing sentiment in the church, and that relief will come much quicker without persecution by misrepresentation and slander.

Neighbor Canada.

Our northern neighbor, Canada, has a new governor-general, who succeeds the Earl of Aberdeen, with whom the people of the United States have had exceptional opportunity to become acquainted. The new governor-general is the Earl of Minto, head of the family of Elliot, and a man of more than ordinary ability. He is not a stranger to Canada, having been military secretary to Lord Lansdowne, governor-general of Canada from 1883 to 1885. During that period he was in active military service as chief of the staff in the Northwest Rebellion of 1885. Prior to that period he had been private secretary at Cape Town, a volunteer in the Afghan war and the Egyptian campaign of 1882, having begun his military service in the Scotch Guards. As governor-general of Canada, appointed by the British government, he will serve for a term of five years at the same salary our president receives, $50,000.

It may be instructive to recall the fact that, if we subtract the territory of Alaska from the total area of the United States, the area of Canada exceeds that of our own domain by some 58,000 square miles. Canada's population, however, is about 5,000,000 to our 70,000,000. Her constitution, by the way, instead of reserving rights to the states which are not specifically delegated to the federal government, reserves the rights to the Dominion government which are not specifically delegated to the provinces. Furthermore, the constitution of the Canadian Dominion, promulgated in 1839, was the first form which has proved so successful in maintaining self-governing colonies which are the mark of Great Britain's wonderful colonial expansion. While it is true that the governor-general is but a titular representative for the purpose of dealing only with questions pertaining to the home government, he is the head of a cabinet representing the departments of the Dominion government, possesses the theoretical right of veto upon certain measures, and can wield no little official and personal influence. The attention of our people has been redirected to Canadian affairs by reason of the sessions of the Canadian-American Commission on disputed questions, and Canada has just

LI HUNG CHANG.

completed the interesting experiment of referring the question of federal legislation to prohibit the liquor traffic to a popular vote of all the provinces. The result has been that seven out of eight provinces voted for prohibition, by majorities ranging from 250 to 36,700. Quebec alone voted against prohibition, by a majority of 34,500. The net majority for prohibition throughout the Dominion, therefore, exceeded 54,000, yet the total vote polled was less than forty per cent of the vote cast at the last election for members of the Dominion Parliament,

and doubt is expressed whether the Liberal government will consider that the plebiscite warrants the enactment of prohibitory legislation.

Turmoil in China. Whether or not China is awaking to those experiences which have transformed Japan within the memory of the present generation, it cannot be denied that there is turmoil in that sleeping empire. The recent war with Japan was a severe eye-opener. Furthermore, the government has been called upon to deal with "reformers" within her own borders, quite after the manner of countries believed to have more advanced civilization. Intrigues of foreign powers seeking to extend their sway, and incidentally to develop China, have been playing havoc with the *régime* of centuries of isolation. Dewey's victory at Manila has turned the eyes of our own people to the far East as never before, and we follow with avidity the news that filters through foreign channels to our papers. Reports of Chinese affairs must be taken with great reservation, because of the interested motives which may be behind the sources of newspaper reports. It appears to be the fact that Li Hung Chang, who visited this country on his late tour of the world, is a central figure still in Chinese affairs. We are told that he was dismissed from the Tsung li Yamun, or Chinese board which deals with foreign questions, by British influence. We are informed that his restoration has been accomplished by Russian influence. It was reported that upon the advice of the Cantonese reformer, named Kang-Yu-Wei, the emperor of China published imperial edicts establishing a postal service, ordering that accounts of government receipts and expenditures should be made public at the capital, and promulgating other customs of western civilization. Close upon this news came the report that the Dowager Empress Tzu-Hsi had forced the emperor to abdicate and ordered the arrest of the prince who would be a reformer. It appears that Kang-Yu-Wei was taken aboard a British vessel as a refugee, and reports spread that not only were a number of his accomplices put to death by the dowager empress, but that the emperor was either sick unto death or had committed suicide. The important news of the moment is, that despite the protests of the Tsung li Yamun, detachments of Russian, British, and German marines have been stationed in Pekin in order, if necessary, to protect their respective consulates from Chinese rioters, and that American marines are within call at Hong-kong, where several ships of Admiral Dewey's fleet are in dock.

COLONEL PICQUART.

The French Crisis. The serious crisis in France developing from the Dreyfus case is not yet past. Since last month's record in this department, a clear and well-defined issue has emerged. We may set aside the alleged confession of Count Esterhazy, appearing in London, where he has been a fugitive, which contains the admission that he wrote the *bordereau* which sent Dreyfus into exile. The significant feature of the situation is the fact that Colonel Picquart, formerly chief of the

secret intelligence department of the French army, and a defender of Dreyfus' innocence, is a military prisoner. Colonel Picquart was charged with forgery by the War Department while General Zurlinden was at its head. General Zurlinden resigned from the War Department and has been appointed military governor of Paris. As military governor, he transferred Colonel Picquart to the military prison, thus becoming military prosecutor of his own charges.

In the meantime the French cabinet, headed by Premier Brisson, referred the question of reopening the Dreyfus case to the Court of Cassation, which decided in favor of revision, and the cabinet is reported to have hesitated to follow the finding of the court. It is within the power of the premier to dismiss the military governor and the minister of war, who have put Colonel Picquart under military jurisdiction. Whether President Faure will side with the premier and the civil authorities or the military governor and the army is the issue of the hour. The fact that a strike among the laborers engaged on Paris Exposition work has resulted in calling out the military to handle riots, may be of sinister significance in the crisis which hangs over the French Republic.

Anarchy and Assassination. An Italian, who proclaimed himself an anarchist, assassinated the Empress Elizabeth,

EMPEROR FRANCIS JOSEPH, OF AUSTRIA.

THE LATE QUEEN LOUISE, OF DENMARK.

wife of Emperor Francis Joseph of Austria, on September 9. The empress, who had shunned for years all public ostentation, was in Geneva, Switzerland, on her way to take an excursion boat when the assassin committed the crime which horrified the reading public. He gave no motive for the deed, save that of a desire to "rid the earth of all who make men miserable." He gave the name of Lucheni when arrested, and declared himself an anarchist by conviction. Public expressions of the press the world over were about equally divided between expressions of horror at the atrocious nature of the crime and sympathy for the Emperor Joseph, and discussion of means to stamp out anarchy. Emperor Joseph, to whose power and tact in handling the complications existing in Austria-Hungary the stability of the empire is due, was about to celebrate the fiftieth anniversary of his reign, when the assassin struck down the empress.

Queen Louise of Denmark. A peaceful death came to Queen Louise of Denmark, surrounded by the members of her family, in Copenhagen, September 29. The good queen, who had passed the age of eighty-one, was popularly called the "mother-in-law of half Europe." Rising from com-

parative poverty to royal power, she was noted for her home virtues, and each of her six children married into some royal family. Her oldest child, Prince Frederick, will succeed to the throne of Denmark, and his wife is the daughter of King Karl XV. of Sweden and Norway. Her second child, Princess Alexandria, is the wife of the Prince of Wales. The third child, Prince Wilhelm, is King George I. of Greece, and he married the Grand Duchess Olga Constantina of Russia. The fourth child, Princess Marie Dagmar, who married Alexander III. of Russia, is the dowager empress. The fifth child, Princess Thyra, is by marriage Duchess of Cumberland. The sixth child declined the honor of election as Prince of Bulgaria some years ago, and married the Princess Marie d' Orleans, of the house which claims the French crown. Thus by ties of blood and the marriage of three sons and three daughters, it is literally true that the death of the queen throws half of the courts of Europe into mourning.

Death and Destruction. Seldom has the history of a month centered about so many deaths of persons. Besides

THE LATE THOMAS F. BAYARD.

those already mentioned at some length, the obituary record contains the names of Thomas F. Bayard, of Delaware, formerly ambassador to England, whose efforts toward cultivating an Anglo-American *rapprochement* seemed to be ahead of time.

THE LATE THOMAS M. COOLEY.

Judge Thomas M. Cooley, of Michigan, acknowledged as the greatest authority on our constitutional law, died on September 12. Five days later the Rev. John Hall, the venerable pastor of the Fifth Avenue Presbyterian Church of New York, died in Scotland. The list of recent deaths also contains the names of ex-Governor Claude Matthews, of Indiana; ex-United States Senator William W. Eaton, of Connecticut; Representative Stephen A. Northway, of Ohio; Sir George Grey, British colonial administrator, and Thomas Joseph Byrnes, premier of Queensland.

Along with the man-made record of a month it may not be out of place to note a variety of unusual manifestations of nature's forces. Within a month the papers have reported a hurricane which swept over the Barbadoes, bringing death to several hundred people and making two thirds of the inhabitants homeless; a destructive tornado in Southern Spain, and a more destructive typhoon in the central provinces of Japan; forest fires, destroying millions of dollars' worth of timber in our Wisconsin lumber regions; and a violent eruption of Mt. Vesuvius.

C. L. S. C. OUTLINE AND PROGRAMS.

OUTLINE OF REQUIRED READING.

FOR NOVEMBER.

First Week (ending November 5).

"Twenty Centuries of English History." Chapter VI.

"Europe in the Nineteenth Century." Chapters IX. and X.

In THE CHAUTAUQUAN:

"English Colonization in the Old World."

Second Week (ending November 12).

"Twenty Centuries of English History." Chapter VII.

"Europe in the Nineteenth Century." Chapters XI. and XII.

In THE CHAUTAUQUAN:

"The Cathedrals of England."

"Lord Palmerston."

Third Week (ending November 19).

"Twenty Centuries of English History." Chapter VIII.

"Europe in the Nineteenth Century." Chapters XIII. and XIV.

In THE CHAUTAUQUAN:

"True Greatness."

"The Chemistry of To-day."

Fourth Week (ending November 26).

"Twenty Centuries of English History." Chapter IX.

"Europe in the Nineteenth Century." Chapters XV. and XVI.

In THE CHAUTAUQUAN:

"The Canning Industry in the United States."

FOR DECEMBER.

First Week (ending December 3).

"Twenty Centuries of English History." Chapter X.

"Europe in the Nineteenth Century." Chapters XVII. and XXII.

In THE CHAUTAUQUAN:

"The Central Element of Organized Matter."

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FOR NOVEMBER.

First Week.

1. The Lesson.
2. A Paper — England's contributions to the crusades.
3. A Talk—The people of Austria-Hungary.
4. A Paper—Literature and art in early Italy.
5. Geographical Study—Africa and its political development.
6. General Discussion — The important events of the week.

Second Week.

1. The Lesson.
2. A Paper—The Crimean War.
3. Select Readings — "Charge of the Light Brigade," by Tennyson, and "Balaklava," by Alexander Beaufort Meek.
4. A Paper—English universities.
5. Readings — "Bannockburn," by Burns, and "Bruce and the Spider," by Bernard Barton.

Third Week.

Cavour Day—November 15.

"His greatness wore the unassuming garb of common sense—but a common sense of colossal proportions, exalted by perpetual direction to the pursuit of what was great and lofty."

1. Biographical Sketch—Cavour.
2. A Paper — Cavour as diplomatist and statesman.
3. A Paper — Cavour's Italy compared with Italy before 1848.
4. General Conversation — Lessons drawn from the life and work of Cavour.

Fourth Week.

1. The Lesson.
2. A Paper — Dangers threatening the Austro-Hungarian Empire. See the article on "The Emperor of Austria" in this number of THE CHAUTAUQUAN.
3. An Essay—The French political system.
4. General Discussion—The week's events.

FOR DECEMBER.

First Week.

1. The Lesson.
2. An Essay—Socialism in Europe.
3. A Paper—The Russian peasantry.
4. A Paper — Church and state under Henry VIII. of England.
5. Book Review — "The Cloister and the Hearth," by Charles Reade.

SYLLABUS OF C. L. S. C. READING.

REQUIRED READING IN THE TEXT-BOOKS.

"TWENTY CENTURIES OF ENGLISH HISTORY."

VI.—THE RISE OF THE BARONS, 1135 A. D.–1216 A. D.

1. Stephen of Blois (pp. 86–89).
   (1) Accession to the throne.
   (2) Private fortresses.
   (3) Foreign invasion.
   (4) Civil war.
   (5) Interference of the church.

The terms of the Wallingford treaty required the destruction of the castles, the banishment of foreign mercenaries, and the resumption of the crown-lands.

   (6) Death of Stephen.

2. Henry Plantagenet (pp. 89–96).
   (1) Continental fiefs.

The continental fiefs included almost all of the western half of the present French Republic; Normandy bordered on the English Channel; Brittany occupied the corner washed by the English Channel and the Atlantic Ocean; Anjou and Maine were small provinces east of Brittany; Poitou [pwä-too′], Guyenne, and Gascony were on the western coast of France, south of Brittany.

   (2) Disappearance of race distinction.
   (3) Subordination of the barons.
   (4) The chancellor and archbishop.
   (5) Reforms of church and army.

"Scutage," *i. e.*, shield money, from the Latin word *scutum*, a shield.

   (6) Judicial reforms.
      (*a*) Assize of Clarendon.
      (*b*) Assize of Northampton.
   (7) Expedition to Ireland.

"Leinster [lēn′ster]. A southeastern province of Ireland.

   (8) Domestic troubles.

"Fair Rosamond" is the name given by legendary history to the daughter of Lord Clifford. Her royal lover, King Henry II., provided apartments for her in a labyrinth in Woodstock, and tradition has it that by means of a silk thread Queen Eleanor discovered the place and poisoned her.

The "justiciar" in the early periods of English history was the chief justice of the kingdom and *ex officio* regent in the absence of the king.

   (9) The death of Henry II.

"Chinon" [shē-nôN′]. A French town about twenty-five miles southwest of Tours.

3. Richard Cœur de Lion (pp. 97–100).
   (1) Characteristics.
   (2) Preparation for the crusades.
   (3) Exploits against the Saracens.

"Longchamp" [lôN-shoN′].

   (4) Plot against Richard.
   (5) The ransom.
   (6) War with France.

"Chateau Gaillard" [shä-tō′ gä-yär′], now a ruin, was built on a cliff three hundred feet above the Seine. The castle of massive masonry was circular in form, the circumference being waved, and on the river side was the donjon, cylindrical in form, with huge walls fifteen feet thick.

   (7) Death of the king.

"Limoges" [lē-mōzh′].

4. King John (pp. 101–105).
   (1) His claim to the crown.
   (2) Loss of French dominions.
   (3) Struggle with the church.
   (4) Magna Charta [kär′tä].
   (5) Union of king and pope.
   (6) Death of King John.

REVIEW QUESTIONS.

1. Name the kings of the period 1135 A. D.–1216 A. D., and delineate the character of each.
2. Describe King Henry II.'s reforms.
3. Give an account of Richard Cœur de Lion's career.
4. Describe King John's contest with the church.
5. What was the Magna Charta?

SEARCH QUESTIONS.

1. What taunt was hurled at Thomas à Becket as he retired from the Council of Northampton, and what reply did he make?
2. The judicial powers of what modern body are derived from those of the Upper Court of Appeal established by King Henry I.?

VII.—THE PLANTAGENET KINGS, 1216 A.D.–1327 A.D.

1. King Henry III. (pp. 106–111).
   (1) The regency.
   (2) Power of the king concentrated.
   (3) Taxes and Parliament.
   (4) Rise of a leader.
   (5) The Oxford Provisions.
   (6) War with the barons.
   (7) Simon de Montfort's Parliament.
   (8) Battle of Evesham.
   (9) Survey of King Henry's reign.
2. King Edward I. (pp. 112–120).
   (1) Survey of events preceding his accession.
   (2) Character of the reign.

(3) Wales subjugated.
(4) The Scottish succession and defection.
(5) War with France.
(6) Insurrection under Wallace.

"Scone" [skoon] is near the Tay, about two miles from Perth. The abbey, erected in 1115, was destroyed in the Reformation riots in the sixteenth century.

(7) The courts and Parliament.
(8) Quarrel with Winchelsey.
(9) Bruce's insurrection.
(10) Character of the king.

3. King Edward II.
(1) His character.
(2) The Gascon favorite.
(3) The Ordainers.
(4) Independence of Scotland.
(5) The Despensers.
(6) Abdication of the king.

REVIEW QUESTIONS.

1. Give an account of the development of Parliament.
2. Give a history of the struggle with Scotland through this period.
3. Who were the influential men of this period, and what did each do?
4. Delineate the character of the three kings.
5. Give an outline of the principal events of each reign.

SEARCH QUESTIONS.

1. What title did Edward I. gain for himself, and how?
2. What building is a monument of the artistic taste of King Henry III.?

VIII.—ENGLAND AND FRANCE, 1327 A. D.–1422 A. D.

1. Reign of King Edward III. (pp. 124–132).
(1) Events from 1827 to 1830.
(2) Summary of the Hundred Years' War.
(3) Causes of war between England and France.
(4) Naval engagement in 1340.

"Sluys" [slois]. A seaport of the Netherlands near the frontier of Belgium.

(5) The campaign of 1346.

"Crécy" is a town of Northern France.

"Neville's Cross" is near Durham, England. The battle fought there in 1346 is sometimes called the battle of Durham.

(6) Fall of Calais.

"Calais" [kă-lā' or kal'is]. A seaport on the Strait of Dover.

(7) The campaign from 1355 to 1360.

"Aquitaine" [ak-wē-tān'] was in Western France between the Garonne and the Loire Rivers.

"Poitiers" [pwä-tyā'] is the capital of the department of Vienne.

"Bretigny" [brā-tēn-yē'].

(8) Loss of possessions in France.
(9) Parliament.
(10) The plague.
(11) Court factions and "The Good Parliament."
(12) Death of the king.

2. Development of the English language (pp 132–133).

3. John Wyclif and the Lollards (pp. 134–135).

"Transubstantiation," the conversion of one substance into another; in Roman Catholic theology transubstantiation is "the change in the consecration of the elements of the eucharist of the whole substance of the bread into the body, of the whole substance of the wine into the blood of Christ, only the appearances of bread and wine remaining."

4. King Edward's sons (p. 135).

5. Reign of King Richard II. (pp. 135–140).
(1) England at his accession.
(2) Socialistic troubles.
(3) Peasants' revolt.
(4) Deposition of the king.
(5) Statute of Præmunire.

6. Reign of Henry IV. (pp. 140–141).
(1) The Percys.
(2) Welsh revolt.
(3) Statute of Heresy.

7. Reign of Henry V. (pp. 141–143).
(1) Henry's qualifications.
(2) Lord Cobham.
(3) The king's French campaigns.

"Agincourt" [aj'in-kōrt or äzh-aN-koor']. A town in the northwestern part of France.

"Troyes" [trwä].

(4) King Henry's successor.

REVIEW QUESTIONS.

1. Give an account of the first period of the Hundred Years' War.
2. Describe the development of the English language.
3. Give a sketch of the work of John Wyclif and its influence.
4. What were the Statutes of Laborers, Præmunire, and Heresy, and what was accomplished by each?
5. Give a history of the second period of the Hundred Years' War.

SEARCH QUESTIONS.

1. What ports of England furnished the chief naval contingent until the time of Henry VII.? By what name are they collectively known?
2. What frightened the prelates assembled at the council convoked by Archbishop Courtenay at Blackfriars? By what name is this council sometimes called?

IX.—LANCASTER AND YORK, 1422 A. D.—1485 A. D.

1. Reign of Henry VI. (pp. 145–153).
(1) The regency and council.
(2) Situation in France.

"Verneuil" [ver-nēly' or ver-nēy']. A French town southwest of Rouen.

(3) Service and fate of Joan of Arc.

"Jeanne d'Arc" [zhan därk'].

(4) Loss of French territory.

(5) The question of succession.

(6) Conflict of Yorks and Lancastrians.

2. Reign of Edward IV. (pp. 153–156).

(1) State of Parliament.

(2) The king's source of revenue.

(3) General view of the times.

(4) The king's wars.

(5) Restoration of Henry VI.

(6) Edward resumes the crown.

(7) The last years of the reign.

3. Usurpation of the throne (pp. 156–157).

(1) Attempt to legalize the act.

(2) Death of the princes.

4. Reign of Richard III. (pp. 157–159).

(1) Petition of the London people.

(2) Concessions.

(3) Conclusion of the Wars of the Roses.

REVIEW QUESTIONS.

1. Give a sketch of the events in France during the regency of John of Bedford.

2. Explain the cause of the Wars of the Roses.

3. Give a history of this war.

4. What progress had the world in general made by the middle of the fifteenth century?

SEARCH QUESTIONS.

1. When did the "Club Parliament" meet and why was it so called?

2. How did the Wars of the Roses affect English freedom?

"EUROPE IN THE NINETEENTH CENTURY."

IX.—EIGHTEEN HUNDRED FORTY-EIGHT IN AUSTRIA.

1. Austrian dominions (pp. 110–113).

(1) General survey of.

(2) Hungarian revolts.

(3) Bohemian uprising.

(4) The check to revolution.

"Windischgrätz" [vin'dish-grāts].

(5) Italian revolution.

(6) Results of the revolutions.

(7) The reaction.

"Radetzky" [rä-det'skē].

2. The Magyar and Slav conflict (pp. 113–115).

(1) Mistake of the Magyar.

(2) The Slavic lands.

(3) Policy of the Magyars.

(4) Revolt of the Slavs.

(5) Action of the ministry.

3. New difficulties in Vienna (pp. 115–116).

(1) Cause.

(2) The revolt.

(3) Result.

(4) A new prime minister.

"Schwarzenberg" [shvärt'sen-berg].

(5) Abdication of emperor.

(6) Hungarian independence.

(7) Aid of Russia.

"Görgey" [gĕr'gĭ].

4. Results of the revolution (p. 117).

REVIEW QUESTIONS.

1. Give a general description of the Austrian dominions in 1848.

2. Describe the revolutions in each division.

3. Give an account of the contest between the Slavs and the Magyars.

4. What were the permanent results of the revolution?

SEARCH QUESTIONS.

1. What title does the governor of Croatia bear?

2. What Bohemian historian was president of the Slavonic Congress of 1848?

X.—DISUNITED ITALY.

1. What Italy suggests (pp. 118–119).

(1) In art.

(2) Character of people.

(3) In religion.

(4) What Italy really is.

2. Italy before the present century (pp. 120–122).

(1) Renowned men.

"Vinci" [vin'chē].

(2) The republics.

(3) Foreign and papal influence.

(4) Result of political conditions.

(5) Idea of Italian unity.

(6) Italy before Napoleon.

3. Italy under Napoleon (pp. 122–123).

(1) Partition of Italy.

(2) Character of the government.

(3) Idea of nationality.

(4) Action of the Congress of Vienna.

4. Italy after 1815 (pp. 124–126).

(1) Character of the reactionary governments.

(2) Revolutionary societies.

"Carbonari" [kär-bō-nä'ri].

"Massini" [mät-sē'nē].

(3) Desire of Italian patriots.

(4) Policy of Pius IX.

(5) Demand for constitutional government.

(6) War against Austrians.

REVIEW QUESTIONS.

1. For what is Italy especially noted?

2. Name some of the noted men of Italy and tell for what they are distinguished.

3. Describe the character of Italian government since 1815.

4. What did Napoleon do for Italy?

SEARCH QUESTIONS.

1. Who formed the Cisalpine Republic and where was it located?

2. What governments were represented at the

Congress of Troppau? What was the principal subject of discussion?

XI.—REACTION IN ITALY AND FRANCE.

1. In Italy (pp. 127–129).
   (1) War in Lombardy.
"Peschiera" [pes-kē-ā'rä].
"Legnano" [len-yä'nō].
"Custozza" [koos-tōd'zä].
   (2) Siege of Venice.
   (3) King Ferdinand's efforts.
   (4) The struggle in Rome.
"Oudinot" [oo-dē-nō'].
   (5) Result of the revolution.
   (6) Lessons of the revolution.
2. Affairs in France (pp. 129–133).
   (1) General results of the revolution of 1848.
   (2) The Constitution of 1848.
   (3) The presidency.
   (4) May Laws.
   (5) Attempt to revise the constitution.
   (6) *Coup d'état.*
"Arnaud" [är-nō'].
"Maupas" [mō-pä']
"Morny" [mor-nē'].
   (7) Second Empire.
3. Permanent results of 1848 (pp. 133–134).
   (1) Prussia and Piedmont.
   (2) Germany.
   (3) Italy.
   (4) Central Europe.
   (5) Feudal burdens removed.

REVIEW QUESTIONS.

1. Describe the Italian revolution.
2. What lessons did the Italians learn from this revolution?
3. Give a history of the events in France which resulted in the Second Empire.
4. Summarize the permanent results of the revolution of 1848.

SEARCH QUESTIONS.

1. Where did King Charles Albert go after his abdication?
2. What noted French historian and orator tried to suppress the insurrections of May and June, 1848?

PART III.—THE THIRD REVOLUTION—RECONSTRUCTION OF CENTRAL EUROPE.

Preliminary.

1. Second and third revolutions compared.
2. Results of the third revolution.
   (1) German unity.
   (2) Italy united.
   (3) Political changes in Austria.
   (4) Third republic in France.

XII.—THE SECOND EMPIRE IN FRANCE.

1. The first decade (pp. 137–142).
   (1) Influences which gave Louis Napoleon the throne.
   (2) Attempt to unite the royal factions.
"Chambord" [shoN-bor'].
   (3) Emperor's marriage.
"*Mésalliance*" [mā-zal-li-oNs'].
"Eugénie de Montijo" [ē-zhā-ne' de mōn-te-zho'].
   (4) Court life.
   (5) Foreign policy of the emperor.
      (*a*) Crimean War.
      (*b*) Austrian War.
"Cavour" [kā-voor'].
"Magenta" is about fifteen miles west of Milan.
"Solferino" [sōl'fā-rē'nō]. A village of Northern Italy.
      (*c*) Military prestige of France.
      (*d*) Commercial treaties.
      (*e*) Annexation of Savoy and Nice.
2. The second decade (pp. 142-144).
   (1) The Mexican episode.
   (2) Events in Poland and Denmark.
   (3) Prussian and Austrian dispute.
"*Bund.*" The German word for league, alliance.
   (4) Domestic affairs.
   (5) Fall of the empire.

REVIEW QUESTIONS.

1. What was the general character of Louis Napoleon's reign?
2. Describe court life in Louis Napoleon's time.
3. Describe Napoleon's first measure of foreign policy.
4. Give an account of the war with Austria.
5. What events led to the downfall of the empire?

SEARCH QUESTIONS.

1. What engagement in the Crimean War has an English poet made the subject of a poem?
2. What was the result of the revolt of Poland in 1863?

XIII.—UNITED GERMANY.

1. Lessons for Germany from 1848 (p. 146).
2. The first move toward unity (pp. 147–150).
   (1) The new king.
   (2) The new leader of the cabinet.
   (3) Bismarck's political doctrine.
   (4) Schleswig-Holstein dispute.
3. The second diplomatic move (pp. 150–152).
   (1) Alliance with Italy.
   (2) Seven Weeks' War.
      (*a*) Prussian successes.
"Königgrätz" [kē'niG-grets; G represents the sound of the German *ch*, which is similar to that of a strongly aspirated *h*]. A town about sixty miles east of Prague.
      (*b*) Italian defeats.
      (*c*) Peace of Prague.
   (3) Dissolution of the Germanic Confederation.
4. The North German Federation (pp. 152–153).

(1) Germanic Confederation dissolved.
(2) Character of the Federation.
(3) Legislative and executive functions.
(4) Alliance with South Germany.
(5) The new political party.

5. French troubles (pp. 153–156).
(1) Political position of France.
(2) Dispute between France and Germany.
(3) War.
(4) Result of war.

6. Establishment of the federal empire (p. 156).

REVIEW QUESTIONS.

1. What facts did the events of 1848 make plain to the leaders of German politics?

2. Explain the cause of the Seven Weeks' War.

3. Describe the character of the North German Federation.

4. Explain the cause of the War of 1870.

5. Give a brief outline of this war and tell its results.

SEARCH QUESTIONS.

1. The course of what battle in the Seven Weeks' War resembled that of Waterloo?

2. Where was the scheme of the North German Confederation first made out and to what body was it afterward submitted?

XIV.—UNITED ITALY.

1. Attempt at Italian unity before 1849 (p. 157).

2. The new phase of Italian history (pp. 157–158).
(1) The new policy.
(2) Austrian influence.
(3) Embodiment of Italian aspiration.
(4) The problem and the solution.
(5) Italy's leaders.

3. The first step toward unity (pp. 158–160).
(1) Maintenance of constitutional government.
(2) Relation of church and state.
(3) Alliance with France and England.
(4) Conference at Paris.

4. The second move (pp. 160–162).
(1) Terms of alliance with Napoleon.
(2) War with Austria.

"Montebello" is about thirty miles south of Milan, and Palestro is about the same distance southwest of Milan.

(3) Insurrection in Central Italy.
(4) Reasons for a truce.
(5) Treaty of peace.

"Zürich" [tsü'rik; k represents the sound of the German *ch*]. The German form of Zurich.

5. Completion of Italian unity (pp. 162–166).
(1) Action of the duchies.
(2) Annexations.

"Romagna" [rō-män'yä].

(3) Meeting of Parliament.
(4) Plan of Francis II.
(5) Cavour's attitude toward Southern Italy.
(6) Garibaldi's expedition.
(7) Union of Naples and Sicily with Sardinia.
(8) First National Legislature.

"Carignano" [kä-rēn-yä'nō].

(9) Venetia conquered.
(10) Rome secured.
(11) Parliament of December, 1870.
(12) Acts of May, 1871.
(13) Italy and Italians.

REVIEW QUESTIONS.

1. What efforts toward unity were made in Italy previous to 1849?

2. With whose accession does a new phase of Italian history begin?

3. Describe the first period of the Sardinian movement for unity.

4. Give a summary of events in Italy from 1859 to 1870.

5. Who are the national heroes of Italy?

SEARCH QUESTIONS.

1. At what battle in the war between Austria and Italy were the three contending sovereigns present?

2. What Italian patriot supported himself two years on Staten Island by making candles? What was the name of his famous legion?

XV.—REFORMED AUSTRIA.

1. Condition in Austria-Hungary (pp. 167–169).
(1) Compared with France and Germany.
(2) Political divisions.
(3) Population and races.

"Ruthenians" belong to the Little Russian race, which dwell in Southern and Southwestern Russia.

"Slovenes" [slō-vēnz']. A name designating the Slavic race which lives principally in Carniola, Carinthia, Styria, and in portions of Hungary and the Maritime Territory.

The "Serbs" are natives of Servia.

"Croats" [krō'atz].

(4) The religion.

2. The political organization (pp. 169–171).
(1) Its character.
(2) The crown.
(3) The ministry.
(4) The delegations.
(5) Legislature of Austria.
(6) The Hungarian government.

3. Period of transition (pp. 171–173).
(1) Result of the revolution.
(2) Events of 1859.
(3) Formation of Parliament.
(4) Dissatisfaction of the Magyars.

"Deak" [dā-äk'].

(5) Surrender of the imperial government.
(6) Settlement of the disputes with Slavs and Magyars.

4. International politics (pp. 173–174).

(1) Interests in the East.
(2) Result of the Berlin Congress of 1878.
(3) The Triple Alliance.
5. Menaces to the empire (pp. 174–175).
(1) The Cekh trouble.
(2) Pan-Slavism.
6. General conditions of the empire (p. 175).

REVIEW QUESTIONS.

1. Explain the complex social conditions with which Austria-Hungary has had to contend.
2. Describe the Austro-Hungarian government.
3. Outline the events which led to the organization of the present empire.
4. What internal questions are most important?

SEARCH QUESTIONS.

1. What town was the seat of the Hungarian revolutionary government in the early part of 1849?
2. What Hungarian patriot refused to avail himself of the general amnesty of 1867?

XVI.—FRANCE AS IT IS.

1. From 1870 to 1875 (pp. 176–179).
(1) The provisional government.
(2) The National Assembly.
(3) The Paris Commune.
(4) Gambetta.
(5) Election of president.
2. The constitution of 1875 (pp. 179–181).
(1) The executive.
(2) The Senate.
(3) The Chamber of Deputies.
(4) The ministry.
3. A general survey of France (pp. 181–185).
(1) The political divisions.
(2) The local governments.
(3) Relation of church and state.
(4) Educational and military matters.
4. History of French politics (pp. 185–188).
(1) Events of 1877.
(2) Election of 1879.
(3) Character of MacMahon's administration.
(4) Election of 1881.
(5) Colonial acquisitions.
(6) Resignation of President Grévy.
(7) Succeeding presidents.
(8) Panama Canal scandal.

"*Fiasco*" [fi-ăs'ko]. A failure.

5. The progress of the republic (pp. 188–189).

REVIEW QUESTIONS.

1. Describe the French government from 1870 to 1875.
2. Describe the constitution of 1878.
3. Describe the French political divisions and explain the government of each.
4. What is the relation of the state to the church?
5. Give an outline of the political events since the organization of the third republic.

SEARCH QUESTIONS.

1. By what majority was the vote for the definitive establishment of the third republic in France carried?
2. In the nineteen years immediately succeeding the fall of the empire how many cabinets had charge of the French governmental affairs?

REQUIRED READING IN "THE CHAUTAUQUAN."

I.—"THE CATHEDRALS OF ENGLAND."

1. Westminster Abbey (pp. 115–120).
(1) Its symbolism.
(2) The builders.

The English Perpendicular is a style of Gothic architecture in vogue in England from the close of the fourteenth century to the middle of the sixteenth. Some of its main characteristics are depressed arches, angular moldings, windows crossed by transoms, and roofs generally somewhat flat.

(3) The south transept.
(4) The chancel.

By ecclesiastical law certain hours of the day were fixed for prayer and devotion. These were known as canonical hours. Originally lauds were performed soon after midnight, prime early in the morning, tierce at nine o'clock, sext at noon, nones at three o'clock p. m., vespers later in the day, and compline in the evening.

(5) The screen of the altar.
(6) The lady-chapel.

The Knights of the Bath were members of the Order of the Bath, said to have been founded in 1399 at the coronation of Henry IV. of England. The candidate was subjected to a bath the evening before admission to the order to signify purification from all sin and the beginning of a new life. This custom gave the order its name. After the time of Charles II. the order was discontinued until 1725, when it was revived by George I. The badge is an eight-point Maltese cross of gold, in the center of which is the rose, thistle, and shamrock, surrounded by three crowns. The motto, "*Tria juncta in uno*" (Three united in one), is engraved on the cross.

"Torrigiano" [tor-re-jä'nō].

(7) Statesman's Aisle.
(8) Church of St. Margaret's.
(9) Jerusalem Chamber.
(10) A possession of the Anglo-Saxon race.

2. York Minster (pp. 120–121).
(1) General description.

"Lierne" [le-ērn']. A rib extending along the apex of a vault from one boss to another.

(2) The city.

"*Magister scholarum.*" Master of schools.

(3) The archbishops.

3. Lincoln Minster (pp. 121–122).
(1) The location.

(2) Appearance.
(3) Bishops.
"Grosseteste" [grōs'test].
4. Lichfield (p. 122).
(1) Position.
(2) Despoliation.
(3) The treasures.
5. Norwich (p. 123).
6. Wells Cathedral (p. 123).
(1) Site.
(2) Thomas Ken.
7. Gloucester Cathedral (pp. 123–124).
(1) Architecture.
(2) Decorations.
(3) The tombs.
8. The Welsh cathedrals and Exeter (p. 124).
9. Hereford, Worcester, Ripon, and Peterborough (p. 124).
10. Chester and subordinate places (p. 124).
11. St. Paul's (pp. 124–125).
(1) Compared with St. Peter's.
(2) The plan and architectural features.
(3) The monuments.
(4) Points of interest.
"*Si monumentum requiris, circumspice.*" If thou seekest his monument, look around.

II.—"THE CANNING INDUSTRY IN THE UNITED STATES."

1. A proverb (p. 126).
2. The effort and purpose of nature (p. 126).
(1) Similarity in the peoples of any section.
(2) Importance of a general distribution of food.
(3) The source of American superiority.
(4) Effect of varied food.
(5) The auxiliary of progress.
3. Prophecy (p. 127).
4. Development of the canning industry (pp. 127–128).
(1) The Frenchman's work.
"Appert" [ä-pair'].
(2) Introduction of tin çans.
(3) Cause of the extension of the business.
(4) Effect on social conditions.
(5) Reasons for existence.
"*Raison d' être*" [ra-zôN dā'tr]. A French phrase for reason for being.
(6) Duties of housekeepers.
5. The great difficulty (p. 128).
6. Canners' association (p. 128).
7. Methods of speculators (p. 129).
8. Benefits of legislation (pp. 129–130).

III.—"LORD PALMERSTON."

1. His power (p. 130).
(1) At home and abroad.
(2) Source of his power.
"*Civis Romanus sum.*" I am a Roman citizen.
(3) England's prestige in his time.
2. Biographical facts (pp. 130–131).
3. Events from 1809–30 (p. 131).
4. His political policy (p. 131).
5. Influence of Canning (pp. 131–132).
6. His foreign policy (pp. 132–133).
(1) The Belgian question.
"Nemours" [nē-moor'].
(2) Polish difficulties.
(3) Affairs in Spain and Portugal.
"Miguel" [mē-gel'].
(4) The Quadruple Alliance.
(5) Aid to South America.
(6) Political matters in the East.
"Unkiar-Skelessi" [oon'kē-är-skā-les'sē]. A small town of Asia Minor not far from Constantinople.
7. The period from 1846 to 1852 (pp. 133–134).
(1) Questions considered.
(2) Example of wise planning.
(3) Illustration of rashness.
8. Home secretary and prime minister (p. 134).
9. Policy toward the United States (p. 134).
10. Characterization (pp. 134–135).

IV.—"TRUE GREATNESS."

1. The greatness of man (p. 135).
2. Elements of true greatness as revealed by the life of John the Baptist (pp. 135–138).
(1) Firmness and courage.
(*a*) The typical example.
(*b*) Power of temperament.
(*c*) Highest type of firmness and boldness.
(*d*) Human weakness.
(2) Elevation above worldly good.
(*a*) Manner of living.
(*b*) Influence of one's aim on character.
(3) Enthusiasm for righteousness.
(4) Humility of self-abnegation before Christ.
(*a*) Two sides of John's character.
(*b*) His temptations.
(*c*) His conception of Christ.
3. How to obtain true greatness (p. 138).

V.—"THE CHEMISTRY OF TO-DAY."

1. Condition of the science of chemistry (p. 139).
2. The goal of chemical science (p. 139).
(1) Elementary steps in the progress of chemical development.
(2) Results of researches.
(3) The foundations of scientific truth.
3. Avogadro's hypothesis (pp. 139–140).
(1) Becomes a law.
(2) Its physical aspect.
(3) The chemical aspect.
(4) Gaseous phenomena explained by this law.
(5) Applicable only to certain substances.
4. Theory of solutions (pp. 141–142).

(1) Osmose.
(2) Osmotic pressure.
(3) Van't Hoff's law.
(4) Laws of osmotic pressure.
(5) Molecular weight of solutions.
(6) Depression of the freezing point.
(7) Application of the laws of solutions.

5. Law of relationships among the elements (p. 142).

6. Classification by atomic weights (p. 142).

VI.—"ENGLISH COLONIZATION IN THE OLD WORLD."

1. British influence and dominion in Africa (pp. 143–145).
(1) Extent of British dominions.
(2) Influence of Great Britain.
(3) West African dependencies.
(4) The Niger territories.
(5) British outposts.
"Tristan da Cunha" [tris-tän' dä koon'yä].
(6) Cape Town.
(7) The southeast coast.
"Natal" [nä-täl'].
(8) South Africa.
"Griqualand" [grē'kwa-land].
(9) South African Republic.
"Transvaal" [trans-väl'].
(10) Zululand.
(11) The South African Plateau.
"Bechuanaland" [bech-oo-ä'nä-land].
(12) South Africa Company.
"Matabeleland" [mä-tä-bā'le-land].
(13) Central Africa.
(14) East Africa.

2. British possessions in India (p. 145).
(1) The East India Company.
(2) Commercial rivals.
(3) Acquisitions.
"Scinde" [sind].

3. Other British possessions in the East (p. 146).
(1) In Arabia and vicinity.
"Perim" [pā-rēm']. An island in the Strait of Bab-el-Mandeb.
(2) British Malaya.
"Perak" [pā-räk'].
"Selangor" [se-län-gōr'].
(3) In the Asiatic waters.
"Seychelles" [sā-shel'].
"Bahrein" [bā-rān'].

4. The Australian commonwealth (p. 146).

5. New Britannia in the antipodes (p. 146).

ANSWERS TO SEARCH QUESTIONS IN "THE CHAUTAUQUAN" FOR OCTOBER.

"TWENTY CENTURIES OF ENGLISH HISTORY."

I.

1. A Roman amphitheater south of Dorchester, England. 2. Wedgwood, produced at the Etruria potteries; Doulton, manufactured at Lambeth, in the towns known as the Potteries, and in the neighborhood of Glasgow; Old Fulham, produced at Fulham; Della Robbia, made at Tamworth.

II.

1. During the governorship of Agricola. 2. From the Firth of Forth to the Firth of Clyde; Graham's Dyke.

III.

1. A celebrated cromlech near Aylesford, England. 2. In the eighth century from near the mouth of the Wye to the mouth of the Dee, near the boundary between England and Wales.

IV.

1. Asser's "Life of Alfred." 2. The Saxon law, which forbade the calling of militia into the field for a longer period than forty days in succession.

V.

1. To the conquest which followed his return from Normandy rather than to that won at the battle of Hastings. 2. Laws were made giving the Jews religious freedom and protecting the Jewish merchant.

"EUROPE IN THE NINETEENTH CENTURY."

I.

1. Lord Chesterfield said, "All the signs I have ever encountered in history as forerunners of great revolutions at present exist in France, and are every day increasing." 2. Rousseau, Voltaire, and Montesquieu.

II.

1. Mirabeau. 2. Assignats; on the security of confiscated church lands, the estates of *émigrés*, and national domains.

III.

1. December 2, 1804, at Paris, by Pius VII; Napoleon. 2. The Legion of Honor.

IV.

1. Under the auspices of the German university students to found a union of German students, promote German unity, and abolish certain customs of the students.

V.

1. For attempting to raise an insurrection in his former kingdom. 2. The five great powers, Austria, Russia, Prussia, France, and Great Britain, and Spain, Portugal, and Sweden.

VI.

1. Baroness Krudener of Riga. 2. To perpetuate existing governments and to put down all liberal movements.

VII.

1. Great Britain, France, Austria, Prussia, and Russia. 2. The settlement of the Belgian question.

VIII.

1. A general amnesty proclamation for political offenders. 2. In the church of St. Paul, Frankfort.

THE C. L. S. C. CLASSES.

1882–1902.

CLASS OF 1899.—"THE PATRIOTS."

"*Fidelity, Fraternity.*"

OFFICERS.

President—John C. Martin, New York, N. Y.

Vice Presidents—John A Travis, Washington, D. C.; Charles Barnard, New York, N. Y.; Rev. Cyrus B. Hatch, Pa.; Frank G. Carpenter, Washington, D. C.; John Brown, Chicago, Ill.; Charles A. Carlisle, South Bend, Ind.; Edward Marsden, Alaska; William Ashton, Uxbridge, England; Miss Alice Haworth, Osaka, Japan; Miss Frances O.Wilson, Tientsin, China.

Secretary—Miss Isabelle T. Smart, Brielle, N. J.

Treasurer—John C. Whitford, Detroit, Mich.

Trustee—Miss M. A. Bortle, Mansfield, O.

CLASS EMBLEM—THE FLAG.

CLASS COLOR—BLUE.

CLASS FLOWER—THE FERN.

THE Class of 1899 are finding their emblem, the flag, very much in demand in these days when patriotism is the country's rallying cry. They are finding also that intelligent patriotism was never more needed than at the present time, and flagging members of the class are, it is hoped, renewing their determination to stand shoulder to shoulder with their comrades and demonstrate that their patriotism is not merely of the impulsive kind.

A FEW words from late letters received from the Class of '98 may prove inspiring to members of the Patriot Class who are gathering up their energies for the long pull. One writes: "The C. L. S. C. work has been almost my only connecting link with the world of literature, art, and science, especially during the hard work of the last three years spent in building up a new business at the cost of an average of fifteen hours a day in harness. The definite plan of reading has been a constant guide for the employment of spare moments, none too numerous, which would otherwise have left no lasting trace of the way in which they have been employed." Another writes: "I was born and brought up in a little log cabin on the Des Moines River, in Iowa, miles from town, church, or school. I never had but three years of schooling in all my life and received that in a primitive school, whose sessions extended over only seven months in the year. My life had been hard and barren all the way and sometimes I have felt very bitter about my toilsome life. I have finished the Chautauqua course and it has done much to extract the bitterness and envy out of my heart. I can say that it has been the one bright spot in a life of poverty and toil." Quite a different experience is presented by a Nebraska graduate who is of foreign birth. "When I came from Germany four years ago and joined the circle I knew so very little English that the first year's study was only a study of the language, and I tell you it took all my germ and perseverance to keep up the work. Now it has become a source of great pleasure as well as profit to me. It has given me in some way an equivalent for what I have given up, with my old home, under more favorable conditions."

CLASS OF 1900.—"THE NINETEENTH CENTURY CLASS."

"*Faith in the God of truth; hope for the unfolding centuries; charity toward all endeavor.*"

"*Licht, Liebe, Leben.*"

OFFICERS.

President—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

Vice Presidents—Rev. John A. McKamy, Nashville, Tenn.; Rev. Duncan Cameron, N. Tonawanda, N.Y.; J. F. Hunt, Chautauqua, N. Y.; Morris A. Greene, Pittsburg, Pa.; Mrs. Mary H. Gardner, Kansas City, Mo.; Mrs. James H. Bentley, Ridley Park, Pa.

Secretary and Treasurer—Miss Mabel Campbell, 53 Younglove Ave., Cohoes, N. Y.

Trustee—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

CLASS EMBLEM—EVERGREEN.

CLASS COLOR—GRAY.

THE present fall season finds the Class of 1900 already half way toward the goal. It is a critical period in the history of the class and a little extra effort put forth at the present time to keep up the spirits of lagging comrades will insure to many a Chautauquan the well-earned privilege of graduation two years hence. It was Napoleon himself who said, "Victory belongs to the most persevering."

A MEMBER of the Class of 1900 is responsible for a most interesting and helpful Shakespeare game, which we gladly commend to students of the English year. Full particulars can be secured from Miss Jessica Lewis, Camden, Me.

CLASS OF 1901.—"THE TWENTIETH CENTURY CLASS."

"*Light, Love, Life.*"

OFFICERS.

President—Dr. W. S. Bainbridge, New York, N. Y.

Vice Presidents—William H. Mosely, New Haven, Conn.; Rev. George S. Duncan, Washington, D. C.; John Sinclair, New York, N. Y.; Mrs. Samuel George, Wellsville, W. Va.; Dr. Eliza Mosher, Ann Arbor, Mich.; Mrs. T. S. Coleman, San Antonio, Tex.; Mrs. Miller, Jacksonville, Fla.

Executive Committee—Mrs. Ned Arden Flood, Chicago, Ill.; Prof. Henry Cohn, Evanston, Ill.; Mrs. Jamison.

Secretary and Treasurer—Miss Harriet E. Barse, 1301 Brooklyn Ave., Kansas City, Mo.

CLASS FLOWER—COREOPSIS.

CLASS EMBLEM—THE PALM.

MEMBERS of 1901 are rapidly reporting for the

new year. This class, which will be the first to graduate in the twentieth century, has been characterized from the first by a most progressive spirit, and letters received from its members indicate a spirit of persistence that speaks well for the future.

IT will not be amiss to remind members of the class once more that it is not necessary to fill out the memoranda in order to graduate. Members who have finished the year's work can report the books on a little blank which has been mailed to all members of the class and this will be placed on file at the Buffalo office. Let any members who are behind start promptly with the new year's reading and bring up arrears at odd moments during the coming year.

A LOUISIANA member of the class writes: "The Chautauqua reading is the first course of solid reading I have ever taken, and this year's work has been hard for me. I could answer very few of the questions from memory and have had to look them up, but I understand the reading better and hope to do better work next year." Another student reports that in the midst of a busy farm life he has carried his work through to a successful conclusion and is much pleased with his year's experience, in spite of the fact that history had never been an attractive subject to him.

SUCH reports of progress from the readers who work under trying conditions give an added stimulus to those who labor under difficulties, as well as to those who need only a very slight spur to enable them to achieve great things.

CLASS OF 1902.—"THE ALTRURIANS."

"Not for self, but for all."

OFFICERS.

President—Dr. John Henry Barrows, Chicago, Ill.

Vice Presidents—Col. Geo. W. Bain, Lexington, Ky.; Mr. A. T. Van Laer, New York, N. Y.; Mr. J. T. Robert, Chicago, Ill.; Mr. M. E. Baird, Ohio; Madame Emma D. Rupin, St. Louis, Mo.; Miss Harriet Walker, Wellesley College; Mr. Albert Watson, Mt. Vernon, Ill.; Miss Sallie Leonard, Jackson, Mich.; Miss Jewell Gould, Aspen, Col.

Honorable Vice Presidents—The Earl and Countess of Aberdeen.

Secretary—Mrs. Josephine Griffith Rabb, East Aurora, N. Y.

Treasurer—Prof. J. C. Armstrong, 530 Lincoln Ave., Pittsburg, Pa.

CLASS FLOWER—AMERICAN BEAUTY ROSE.

THE new Class of 1902 is rapidly increasing its membership. Many states are already represented and indications point to a large enrollment. Among other interesting letters asking for information comes one from a southern army post, from a private soldier, who writes: "We desire to take up your course in the Chautauqua Reading Circle, as we can carry on our reading more systematically under your direction. We are anxious to become members immediately."

THE first circle to report for the Class of 1902 was a circle of fourteen members from Freehold, N. J. This is composed entirely of members of the new class. The circle at Kokomo, Ind., otherwise has the honor of being the first to report a large number of members for 1902—more than twenty members having been enrolled.

A LARGE rally in Providence, R. I., held on the 26th of September, will bear an important part in the membership of the class.

A MEMBERSHIP Book is mailed to every member of the Class of 1902 as soon as his name is entered at the Buffalo office. Any member who has failed to receive the book should apply at once to John H. Vincent, Buffalo, N. Y., so that he may be fully equipped at once.

CIRCLES formed of new members are specially urged to bring before them the importance of enrolling as regular members. It will make a very great difference in the spirit of the circle if every member catches the class spirit and plans at the outset for no less than the full four years' course.

MEMBERS of the new class are also reminded that they can begin after the 1st of October, and, by a little extra effort, easily overtake the class. The English year is an interesting one and once begun there will be little difficulty in carrying it through.

GRADUATE CLASSES.

AT this time of year it behooves every C. L. S. C. graduate to consider his past and his future and to plan so that the one may be worthy of the other. A new year lies ahead and a little wise forethought will enable the C. L. S. C. graduate to render valuable service to his *alma mater*.

> And he who waits to have his task marked out
> Shall die and leave his errand unfulfilled.

TWO new courses in domestic science have recently been added to those for graduates. The list of books is given here, as many who are interested in this subject will not find the courses in the latest C. L. S. C. hand-book:

FIRST COURSE.

Physiology.

Physiology for Beginners. Foster and Shore. 75c.

Chemistry of Foods and Cooking.

Food and its Functions. James Knight. $1.00.

Food Adulterations.

Food Materials and their Adulterations. Ellen H. Richards. 75c.

Sanitation.

Home Sanitation. Ellen H. Richards and Marion Talbot. 25c.

The Invisible World.

Story of the Bacteria. 75c.

Dust and its Dangers. 75c.

Drinking Water and Ice Supply and their Relations to Health and Disease. Mitchell Prudden, M. D. 75c.

Primer of Hygiene. Ernest S. Reynolds. 35c.

SECOND COURSE.

Chemistry of Cleaning.

Chemistry of Cooking and Cleaning. E. H. Richards and S. Maria Elliott. 50 cents.

Study of Plant Life.

The Essentials of Botany. Charles E. Bessey, Ph.D. New Edition. $1.25.

Hygienic Dress.

The Well Dressed Woman. Helen Ecob. $1.00.

Home Nursing.

Emergency Notes. Glentworth R. Butler. 50c.

Home Decoration.

The House Comfortable. Agnes Bailey Ormsbee. $1.00.

CLASS OF 1889.—"THE ARGONAUTS."

"Knowledge unused for the good of others is more vain than unused gold."

OFFICERS.

President—W. A. Hutchinson, D.D., Yellow Springs, O.

Vice Presidents—Miss Laura A. Shotwell, Brooklyn, N. Y.; Mrs. J. R. Hawes, Louisville, Ky.; Mrs. B. T. Smelser, Albany, N. Y.

Secretary—Miss Annie R. Wells, 83 Lexington Ave., Brooklyn, N. Y.

Treasurer—O. M. Allen, 35 Massachusetts St., Buffalo, N.Y.

Trustee—Rev. S. Mills Day, Honeoye, N. Y.

CLASS FLOWER—DAISY.

GREETINGS TO THE CLASS OF '89.

Dear Classmates—As next year will be the time for our decennial I write to "stir up your minds by way of remembrance," and to suggest that we write in our personal calendar—"I will endeavor to be present." We hope to have a large attendance at our "reunion." A program of exercises befitting the occasion is in the hands of a committee. Jason will doubtless exhibit his "golden fleece" again, and in anticipation of meeting many of you, I now greet you—"All hail, ye Argonauts"—make ready for the decennial of 1899.

W. A. HUTCHISON, President.

Yellow Springs, O., Sept. 15, 1898.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God." *"Let us Keep our Heavenly Father in the Midst."*

"Never be Discouraged."

C. L. S. C. MEMORIAL DAYS.

OPENING DAY—October 1.
BRYANT DAY—November 3.
SPECIAL SUNDAY—November, second Sunday.
MILTON DAY—December 9.
COLLEGE DAY—January, last Thursday.
LANIER DAY—February 3.
SPECIAL SUNDAY—February, second Sunday.
LONGFELLOW DAY—February 27.
SHAKESPEARE DAY—April 23.
ADDISON DAY—May 1.
SPECIAL SUNDAY—May, second Sunday.
SPECIAL SUNDAY—July, second Sunday.
INAUGURATION DAY—August, first Saturday after first Tuesday.
ST. PAUL'S DAY—August, second Saturday after first Tuesday.
RECOGNITION DAY—August, third Wednesday after first Tuesday.

SPECIAL MEMORIAL DAYS FOR 1898–99.

ALFRED DAY—October 18.
CAVOUR DAY—November 15.
CROMWELL DAY—December 16.
GLADSTONE DAY—January 14.
DRYDEN DAY—February 18.
WORDSWORTH DAY—March 17.
SHELLEY DAY—April 20.
TENNYSON DAY—May 18.

THE new C. L. S. C. year progresses auspiciously. Reports of Chautauqua rallies are being received from east and west, from north and south. Recent letters from the Pacific coast report a Chautauqua revival in progress, and in this connection the interesting report of the C. L. S. C. Alumni of California, which held its twelfth reunion in October, is worthy of special mention. The state secretary from Alabama, Mrs. Jarvis, proposes to visit a large number of towns in her territory and establish the work more permanently. Her report of the reception given by the Selma Chautauquans to the State Federation of Women's Clubs reveals much activity in this far southern field. To Mrs. L. S. Corey, state secretary for Nebraska, much credit is due for the arduous labor of preparing the Chautauqua exhibit for the Trans-Mississippi Exposition and also for her success in arranging for the incorporation of the C. L. S. C. work in Nebraska as an auxiliary body in the State Teachers' Association. The outlook in every part of the country points to a most successful year.

THE BRYANT BELL RINGS AT OLD CHAUTAUQUA.

THE opening of the C. L. S. C. year on the first of October was as usual celebrated with dignified hilarity by the members of the C. L. S. C. who keep the Chautauqua fire burning on its most central and sacred hearthstone at old Chautauqua itself.

Announcement was made a few days beforehand that all members would be expected to rally in Miller Park at 11:45 on the first of October, and at the appointed hour the quiet avenues were awakened by the rush of hurrying footsteps, as C. L. S. C. members of all ages and callings laid aside their duties, however imperative, and abandoned themselves to the one supreme privilege which belongs to the resident Chautauquan.

To have a hand in the ringing of the historic old Bryant Bell, which calls every C. L. S. C. member

the world over to begin a new year of study, is an experience known to but few, but by those few cherished as an honor and a responsibility. For the duty of ringing the famous bell was not one which these Chautauquans delegated to a few, not they. Every one of the fifty persons present, even to the grandmothers, who believed that "Age is opportunity no less," laid hold of the rope and pulled vigorously. The more imaginative among them doubtless listened for the response, and perhaps heard it, too, from thousands of hearts listening for the stroke and

> Keeping time, time, time
> To the music of the chime.

After the ringing of the bell a basket picnic was the next feature of the program, and as the Chautauquans made inroads upon the viands set before them we may believe that their talk was all of "seals" or "orders," or possibly words of good cheer to the undergraduate still on the hither side of the goal. Between whiles a committee indicted a telegram to Chancellor Vincent, which contained in substance the following message and was despatched at once by a unanimous vote:

> The A. M. Martin Circle sends greeting to Chancellor Vincent on Memorial Day, October 1. The Bryant Bell was rung, chimes played, and "Blest be the Tie" sung, after which a picnic followed.

At the close of the festivities Mr. A. M. Martin, the general secretary, who still lingers at Chautauqua, gaining, it is hoped, new health and strength from the bracing climate, addressed the Chautauquans on two vital subjects, the local circle and the Chautauqua library. The latter, which has become a cherished institution among the winter residents, is to be opened on October 3 with the addition of some new books, and the local circle was invited, as usual, to find its place of meeting also in the cozy C. L. S. C. office, which during the winter months becomes the habitat of the library. The new year thus well launched upon its way, the company dispersed, leaving the tall trees to watch like sentinels over the bells and the quiet lake, while the warm October sunshine cast a soft radiance over the historic spot.

MAINE.—Seaside Circle, of Belfast, celebrated Lanier Day, on June 27, in the same creditable manner in which their entertainments are always carried out.

CONNECTICUT.—The closing meeting of the faithful sixteen at Ansonia consisted of a pleasant outing, with afternoon lunch, up the Housatonic River. This circle has done good work during the whole year.

NEW YORK.—On April 23 President Straley and Secretary Lant, of the Brooklyn Union, spoke before the De Kalb Circle in the committee room of the De Kalb Church. Owing to a shower which came at an inopportune moment, the attendance was not as large as expected, but the lectures were both excellent, and the subject treated, "Institutional Churches," was one of interest to all, as shown by abstracts sent by the secretary of De Kalb, but which space will not permit us to reproduce.—— Reports from two Buffalo circles show that the closing exercises of the year were occasions of great rejoicing. The C. L. S. C. of the Delaware Avenue M. E. Church represents the literary part of the Young People's Society. They are thirty-two in number, fourteen of whom graduated this year. The circle was divided into two divisions and the side having the most points at the end of the year was banqueted by the losing side. The banquet program, decorated with a hand-painted design in double violets, was a souvenir to be prized by any lover of beauty. The class song, "Marching to Chautauqua," printed on a separate card cut in the shape of a circle, was arranged to the tune of "Marching Through Georgia." This song is of exceptional interest, as all of the class have contributed to the song with varied results as to rhythm and sentiment, but all with the jubilant tone of victory over the four years' course. The toasts were on the following subjects: "Retrospectus," "Chautauqua," "The Ladies," "The Men," "The Wandering Chautauquan," "Reflections of a Backslider." The other circle sends a neatly arranged program with a C. L. S. C. monogram on one cover, and on the other two verses of "Auld Lang Syne." The banquet was held at Plymouth Church, May 31, and the following toasts were responded to with genuine Chautauqua spirit: "C. L. S. C.," "Our League," "The Third Spoke," "Victors and Vanquished," "Ribs," "Our Benedicts and Bachelors," "Our Country," "What's Left."——Daintier souvenir programs could scarcely be imagined than those presented to the participants in the annual banquet at Hall's Corners. Violets in picturesque groupings, painted in water colors, adorned the cover, and inside were arranged the program, class song, and list of members. The meeting was held at the home of Mrs. Wilson, president of the class, where fifty C. L. S. C.'s and their friends were gathered, and as each one entered he was presented with a program and Lanier's photograph. After the program, which consisted of recitations, the class chronicle, the class prophecy, and music, refreshments were served, after which the circle presented Mrs. Wilson with several books, including Shakespeare and Will Carleton. The diplomas were then presented.—— The kindly face of Sidney Lanier looks out from the first page of the program for "An Evening with Sidney Lanier," held June 17, by the Trinity Circle of Newburgh. The program carried out the idea given in the June CHAUTAUQUAN with very excellent results. Two graduates are num-

bered in this circle.——We are glad to receive the following from a loyal 1900 circle: "At Yonkers Park we have Prospect Circle of C. L. S. C., belonging to the Nineteenth Century Class. We have found much pleasure and profit from our studies and meetings and derive much inspiration from our mottoes. We are looking forward with pleasurable anticipation to a visit to Chautauqua in 1900. At the last meeting of the circle this year the ladies contributed each a share in the following subjects: history, Rome, Germany, music, painting, child life, and nature study. At the close an appropriate acrostic was read, which was composed by a friend of the circle."——Two circles are to be found at Jamaica, one a regular reading circle and the other an alumni circle, in which only those having Chautauqua diplomas can be admitted.——The Epworth League of Lansingburgh has formed a circle.——The Current Topic Circle, of Elmira, is wonderfully progressive.——Chautauquans will be grieved to learn of the death of a noble sister of the Hurlbut Circle. The acting secretary pays this tribute to her beautiful life: "The members of Hurlbut Circle, organized four years ago at Prohibition Park, West New Brighton, have been faithful, in the main, to the readings, but could have no heart for public graduating exercises this year. On August 14 their beloved secretary, Mrs. De Ette C. Haskell, after a long illness, passed from her earthly life. A loyal Chautauquan, of fine intellectual powers, true and noble in thought, word, and deed, she was the friend of every righteous cause and of every oppressed struggler in life's battle. She believed in encouraging sincerity of thought and the utmost freedom of expression, guided only by a spirit of love for the truth and the laws of God. The Chautauqua mottoes were not meaningless to her. She lived them and taught them; and so well was she loved that the circle would have no other permanent officer, even during her absence in a Colorado sanitarium, and her brief residence afterward. We cannot feel that she is far removed from us, even now, or that her beautiful soul has changed so as to be less closely related to us, because of the experience which we blindly call death. For her it was only entering into a fuller realization of those pure delights of which our little circle had many a foretaste through her loving influence. Precious in memories, the inspiration of her words and presence will be ever felt by those who knew her best."——During the past year the Chautauqua Union of New York City has had its usual number of social features, including the eighth annual outing on Decoration Day, when the steamer *Taurus* conveyed the party up the Hudson to Empire Grove, near Peekskill, and the tenth annual moonlight excursion, which exceeded all former attempts in making this yearly event a success. The steamer, *General Slocum*, was larger than any before secured, and Iona Island was the picnicing ground. One of the most unique features of the excursion was the salute of twenty guns, one for each of the C. L. S. C. classes, which was fired as a signal for departure from the grove. This place is famous for its marvelous echoes, no less than seven reverberations being distinctly heard.

NEW JERSEY.—Alpha Circle of Vineland had one graduate in the Class of '98, Mrs. Lizzie Gould Walls, and the commencement exercises in her honor were held June 8 at "Wallsholm." The invitations issued were exceedingly pretty, with the bunch of blue violets painted on the card and tied with a bow of green ribbon. A Chautauqua evening was spent not long ago by the Alphas and their friends at the home of Mrs. Hoffman and her mother, Mrs. Smith. Among the distinguished guests present were the princess of France, Portia, Ophelia, Julius Cæsar, Shylock, Olivia, Cardinal Wolsey, and the archbishop of Canterbury. These ancient people were so well represented that it was hard to realize that they were only "make-believe." The guessing was an interesting feature, and games and refreshments followed, making a fitting end for a most delightful occasion.——The church paper, *Crumbs*, of the West Side Avenue M. E. Church, Jersey City, reports the last meeting of the Beach Circle as one of exceptional interest. The program was made up of papers and readings from Lanier.——The spirit of knowledge has taken hold upon fourteen ladies of Freehold, who not only have decided to read the course but have all enrolled as members of the class.

DISTRICT OF COLUMBIA.—Six Laniers from Washington, Hamline Circle, were graduated this year.

WEST VIRGINIA.—The literary department of the Epworth League of the State Street Church, Charleston, made the Chautauqua reading a part of its work for last year. A printed pamphlet announces The League University Extension Course with eminent lecturers. A local paper gives the following concerning the closing exercises of the circle: "The local Chautauqua circle celebrated the completion of its year's work by a banquet at the Hotel Ruffner. At 8:30 o'clock the banqueters began to assemble and spent an hour socially in the parlors of the hotel. Prof. Arlington Smith rendered a number of beautiful piano solos, and at 9:30 the party was seated at the tastefully decorated banquet board, and discussed a well-served menu of a dozen courses. The toasts and responses were particularly happy under the tactful direction of Symposiarch M. P. Shawkey, who was also chairman of the committee on arrangements. The 'hits' of the responses were numerous and effective." We quote concerning one of the toasts: "Governor At-

kinson regarded the discovery of the Chautauqua idea as among the greatest of the nineteenth century. It taught people how to use their eight hours of leisure; eight were enough for work, eight abundant for sleep, and the Chautauqua idea demanded that a part of the remaining eight be devoted to study. He contended that every one has plenty of time to take the course, and after four years of work in it the student would be sure to pursue still broader courses of study. The governor's remarks were well received, all present knowing him to be one of the first graduates, and a most indefatigable student of literary and scientific subjects."

SOUTH CAROLINA.—The work of the Chautauquans at Summerville is progressive, as shown by the following extract from a letter by a member of the circle: "As there are few books in our circle we do most of our reading at the meetings, so do not have time for the programs as arranged in THE CHAUTAUQUAN. But we always spare a few moments for one or two essays, a literary salad, or a debate, and once a month we discuss current events. We make a great point of pronunciation, and the critic and dictionary are very conspicuous at every meeting. Miss Florence Merriam, the ornithologist, was in Summerville not long ago, and at the request of our circle gave us a talk on birds. At one of our meetings we had had a spirited discussion on the killing of birds for hats, so we asked Miss Merriam to talk to us about this, and she also told us many interesting things about our feathered friends in Summerville."

GEORGIA.—The Brownings of Atlanta are seven busy women, but they find time to give attention to the Chautauqua reading, and they are so much interested in the work that, although they graduated with the Laniers with honor, they will keep on reading the coming year's course. A debate, held in April, on the subject of the justification of the war with Spain, showed the ladies to be well informed on the affairs of state. A short poem, by Sadie J. Luther, is a tribute to Lanier:

> Oh, dearest to our hearts is that sweet flower
> Of humble, modest birth—the violet!
> Whose gentle, drooping face, by south winds met
> And kissed, gives back such sweetness from its bower
> That all mankind would wish to linger near
> To breathe the perfume of the flower's sweet breath!
> My heart of hearts a lesson learns—till death
> It ne'er that lesson will forget, for dear
> To me the thought, though lowly it appear,
> Some service I may render to mankind—
> The perfume of a deed, or word, most kind.
> Our sweet-songed poet of the South, Lanier,
> The violet's lesson writes in words sublime:
> "The humblest life that lives may be divine."

ALABAMA.—The reception and banquet given by the circle at Selma on the event of the closing of the year's work was the most elaborate of any former undertaking, and Chautauqua seemed to make a lasting impression on all visitors. The parlors of Hotel Albert were given up to the C. L. S. C.'s and their guests, and the rooms presented a pretty sight with their abundance of flowers and bunting. On the reception committee was represented every leading literary club of the state and city. We are in receipt of an invitation for this delightful occasion, which is printed on gray paper, on which is tied a small twig of evergreen.

MISSISSIPPI.—The fourteen Chautauquans at Okolona, forming the Chautauqua Magazine Club, observed Sidney Lanier Day according to the suggested program, and the local paper gives the meeting a complimentary notice.

ARKANSAS.—"The Riversides" is the name chosen by a new band of workers in Helena. They are busy teachers and are divided into two sections, which meet Tuesday evenings and Wednesday afternoons.

TEXAS.—Shakespeare is receiving the attention of the Waxahachie Circle.

OHIO.—The ladies of the Chautauqua circle at Ashland held the last meeting of the year at the pleasant home of the president, Mrs. I. H. Good. Besides the members of the circle there were a number of invited guests. The evening was devoted to the poet Sidney Lanier, the story of his life, readings from his poems, his words, set to music, sung by competent artists, all making an impressive service. Dainty refreshments were served, at which Miss Helen Good very ably presided. The remainder of the evening was spent in a good social time.——The circle of the Hough Avenue Congregational Church, Cleveland, celebrated Lanier Day in an appropriate manner, the papers being of exceptional interest. The music for the poem, "The Ballad of Trees and the Master," not arriving in time for the meeting, one of the ladies composed the music to which the song was sung. The secretary says concerning the circle: "We have enjoyed the work, and, though we were but ten, we certainly have had very pleasant and improving meetings. We have used the programs in THE CHAUTAUQUAN by way of suggestion, selecting those topics which have seemed best adapted to our needs, and the result has been that we have had many excellent papers and talks. We limited the time of the meeting to one hour and a half, and have usually kept quite close to the allotted hours. During that time we have held ourselves to work, with just enough of sociability to keep keenly alert."——The Alpha Circle of Cincinnati reports through the wide-awake secretary: "On April 1 we had our long-looked-for C. L. S. C. gathering here. The parlors of Wesley Chapel were crowded to their utmost capacity to hear Mr. Edward Betty, the well-known Shakespearian critic, on 'Shakespeare and His Works.' It was a masterly effort

and was thoroughly appreciated by the C. L. S. C.'s. At the close of the lecture a social hour was spent and refreshments were served by the Wesley Circle. The occasion brought together not only members of the city circles but some from Price Hall, Clifton, and Terrace Park, Ohio, and Bellevue and Covington, Ky. Alpha is devoting its time to 'the Shakespeare seal,' and we thought a good way to get the C. L. S. C.'s together, especially since we have not had a gathering for some years, would be by offering an extra inducement in the form of an intellectual feast, and asked the Wesley Circle to join us. This they did and more besides; they surprised us at the social hour with refreshments. It was an evening long to be remembered, and because of its success we are arranging now for a Saturday afternoon in June to be spent by the C. L. S. C.'s of the city and vicinity at 'Clovernook,' the home of Alice and Phœbe Cary. It is some ten miles from the heart of the city."——Two Laniers of the Worthington Circle have joined the ranks of the post-graduates. The number of the class has been limited to thirty and the work has been excellent, with quite regular attendance.

INDIANA.— An example of the fidelity of old Chautauquans is found in the following: "The readers of THE CHAUTAUQUAN may be interested in a sketch of the post-graduates of the original Philomathean Circle of Butler. This year will bring to a close the ninth year of our existence as a circle and club. All of our number, twelve active members, are graduates of the C. L. S. C., many of whom have won several seals. Since the graduation of our members we have taken special courses, always taking THE CHAUTAUQUAN and books used for C. L. S. C. post-graduate courses. This year we have had a fine year's work, the Current History Course. Our club, known as Ladies' Literary Club of Butler, are all S. H. G.'s. We had printed programs for the whole year's work, and but few lessons have deviated from the program. A meeting of special interest was an evening with Riley and again with Schiller, with Goethe, etc. Each member feels that the years we have devoted to the C. L. S. C. have borne good fruit, that systematic study as laid out by the C. L. S. C. has kept us in touch with the best in literature and the news of the day. Each member has contributed her share in a social way also. Conversational teas, German Kaffee Klatsches, authors' teas, and dinners, after which fine programs would be carried out in the evening, good papers and fine discussions—all as a result of having been working and keeping in touch with the Chautauqua work. Last, but not least, the ladies gave a fine entertainment for the children whose busy mothers have for nine years devoted so much time to the Chautauqua work and who in time will become active Chautauquans. May the light of Chautauqua ever shine, is the sincere wish of old Chautauquans, the L. L. C. of Butler, Indiana."——The C. L. S. C. Round Table of Kokomo has issued a little pamphlet, with green covers and gold lettering, in which is given the program for each meeting, with the leader and place of meeting; it also has several inserts, picturing some of the English authors shown in "From Chaucer to Tennyson." The following appears in one of the local papers: "Dr. and Mrs. Kirkpatrick and Mr. and Mrs. A. K. Wilson entertained the Chautauquans last evening in a most delightful manner by a landau party. The jolly crowd numbered thirty-three and presented a gala appearance on our streets. There were five landaus and one trap, beautifully decorated in American colors. The party was given in honor of Mrs. H. G. Woody, who is soon to leave Kokomo, very much to the regret of all her Chautauqua friends, as she is recognized by all as one of the strongest members of the circle. These annual drives have heretofore been given by Mrs. Wilson and have included the incoming class, but the circle has grown to such proportions that this is no longer possible, the membership now numbering fifty. The first drive, given five years ago, consisted of a party of six. The Class of 1902, numbering twenty, are assured that they will receive their honors later."——The Althea Circle, of Elkhart, gave their annual reception at the home of Mrs. Babb to a number of invited guests. After an elaborate repast the toasts, "The Chautauqua Movement," "Our Country," and "Our Chautauqua Girls," were greatly enjoyed. A review of the year's work was given by one of the members. It showed the work to have been valuable and instructive. The evening closed a year of profitable work and leaves the members highly enthusiastic, with every prospect of a larger membership for the ensuing year. ——"The past year of the C. L. S. C. of Knightstown," writes the secretary, "has been very pleasant and profitable to its members, and from a membership of sixteen the average attendance each Friday afternoon was about fourteen. Each one was assigned a certain portion of the work, thus making the interest more general. We found the books very interesting and profitable, but especial interest was shown for 'Medieval Europe.' Seven of our members have completed the four years' course this year. We closed our year's work with our annual outing at the country home of our president, Mrs. Anna B. McGuffin. We have spent many evenings socially, but the most pleasing event was our reception, from 2 until 6 on the afternoon of June 22, to the Shakespeare, American Literary, Avon, and Hypatia Clubs, held at the home of Mrs. C. D. Morgan. An art exhibit of water colors, ink and pen drawings by R. B. Gruelle of Indianapolis and J.

A. Seaford of Boston was the interesting feature of the entertainment. The house was tastefully decorated with palms, purple clematis, and ferns, representing the color and emblem of different classes. Sweet strains of music from an orchestra in the hall above added much to the occasion. Punch was served in the east parlor, and after viewing the pictures the guests were served in the dining-room with pine-apple ice and cake, with sweet peas as favors. There were many guests from out of town among them. After the departure of the guests, a delightful lunch was served by Mrs. Morgan, and then the husbands of the ladies were entertained during the evening. An organization of the alumni is spoken of favorably."

ILLINOIS.—Interest in Chautauqua work has revived in Rochelle, where twenty have formed themselves into a Society of the Hall in the Grove. ——"The reception and banquet given at Hotel Delos, Friday evening, June 3, by the C. L. S. C. Society of the Hall in the Grove was a remarkably pleasant function. It was given especially for the entertainment of the graduating class of '98 and its associate members and was the first affair of its kind ever given in our city. There were present, besides the members of the alumni and graduating class, the honorary members and a few friends. A piano solo was rendered by Mrs. Ida Craft, then Mrs. Bain, of the Class of '92, gave an address of welcome to the Class of '98 and in the name of the alumni society presented the members, Mrs. W. P. Landon and Miss Viola Freeland, each with a bouquet of violets, their class flower, after which the Chautauqua salute was enthusiastically given by the members. Then followed the secretary's report of the organization and plan of the alumni society. Mrs. Landon next favored the company with a vocal solo. The committee had prepared a very amusing diversion, which consisted of a test of the olfactory nerves, and for about half an hour all present were merrily engaged in investigating the contents of small bottles of liquid, or, as was wittily put by one of the speakers later in the evening, 'nosing for information.' Miss Pratt next proposed a few questions of deep intellectual import and then the doors of the banquet room were thrown open and all proceeded to give due attention to that feasting of the inner man whose needs must be met in order that the intellectual man may flourish. At the close of the feast President Philbrook addressed the company in a few pleasing remarks, and then, acting in the capacity of toast-master, he called forth a number of brilliant responses. A short social time followed the banquet and the evening's 'feast of reason and flow of soul' was concluded."

MICHIGAN.—A patriotic spirit pervaded the assemblage of Benton Harbor Chautauquans as they met recently at the home of Mrs. Hendrix to hold a regular meeting. The rooms were tastefully decorated with flags, and each person at roll-call gave an account of some incident or engagement in the war. The evening was thoroughly enjoyed by all present. These same Chautauquans, at a more recent time, invaded Mrs. Hendrix's home and from there made a raid on Mrs. Ward, the ex-president, and presented her with a garnet gold graduate pin.

WISCONSIN.—A company of ten busy housekeepers at Berlin joined in the Chautauqua work in 1896 and are now following their motto, "Step by step we gain the heights." Their class color is pink, and the flower the white carnation.

MINNESOTA.—The admirable work of the Pierian Circle at Stillwater is always a matter of peculiar interest to Chautauquans. This circle is held in the Minnesota State Prison, where it has been a marked feature of the educational life of that institution ever since 1890. It is greatly to the credit of any club to have maintained an unbroken organization for eight years. With many such associations for study, only very strong social bonds are able to keep the club together for a long period of time. This incentive is, however, lacking in the Pierian Circle, since, though there is unquestionably a strong social spirit among the members, the constant changes always tend toward a weakening of the spirit of unity. Yet in spite of this disadvantage the circle has made a highly creditable record during eight years, with an average of more than thirty members at every meeting. Meetings are held every fortnight on Sunday in the chapel, when a varied program is presented. Many admirable papers have been read by the "Pierians" during the year, and these have been published in the *Prison Mirror* from week to week. It is pleasant to note from the secretary's quarterly report that there had been but two failures to respond at roll-call with questions, which is one of the rules of the circle, and that no one had failed in his performance of duties assigned. Many interesting debates upon social and political topics have been held, and judging by the comments in the *Mirror* these have been occasions of no little interest. Chautauqua has every reason to be proud of the genuine, honest work being done by the circle, which has held on its way steadily in spite of every obstacle.

IOWA.—Des Moines is truly a home of Chautauquans, where many a circle is doing its part for the cause. The president of Oaklawn Circle writes: "The Chautauquans of Des Moines have closed a most successful year. We have twelve circles, and these unite in a league, and as such hold monthly meetings. The last of these was held June 14, at a beautiful suburban residence, the home of one of our members. Mr. Mitchell, superintendent of the local Assembly, was present and assisted in arranging some of the details for maintaining a rest tent

on the Assembly grounds during the July session. The Oaklawn Circle is one of the largest, now numbering fifteen members, who have read two years, and I think will be loyal to the work for two more years. We hold an extra meeting once a month, and the literary feature of this monthly meeting is a review of the articles in THE CHAUTAUQUAN, the articles having been assigned to different members of the class one month before. A social hour and refreshments follow. We have done this for two years, and find the plan a success."——"We are all very busy people," says a member of Victor Circle, "but we have felt much interest in the Chautauqua work for the past four years, and will always advise others to take the work. We that finish this year wish to go on with a post-graduate course for the following year."

NEBRASKA.—Miss Julia Fuller sends a most interesting letter, from which we quote: "Our circle has just closed its fourth year. We meet every Monday evening throughout nine months of the year from 7:30 to 9:30 and pride ourselves on being very punctual. Our attendance is also noteworthy. We meet at the homes of different members, which are widely scattered over our city, and our membership is composed of busy teachers, housekeepers, and business men, but rain and snow and social attractions have never prevented a gathering of the circle, no matter how stormy the night or how alluring the attraction. During the whole four years of its existence the Beatrice Chautauqua Circle has never missed a single meeting. There are thirty-five members on our roll, but some who have been with us still pursue their reading at home though unable to meet with the circle. As this completes the fourth year the first class is ready to graduate. There are fifteen of us who are ready to receive our diplomas but we have decided to postpone our graduation till next year. The Beatrice Chautauqua Assembly held annually at this place has been discontinued this year on account of the Trans-Mississippi Exposition and we feel we owe it to our own town and Assembly to wait a year. It will also enable some who are behind in their reading to make up back work. The punctuality of the beginning and closing has doubtless contributed much to our success. We confine ourselves strictly to the lessons during the regular weekly meetings, but custom has decreed that, besides the meetings for study, there shall be a social gathering early in the season and a banquet at the close of the year's work. The fourth annual banquet of the circle was held Friday evening, May 27. The program reflected the feeling of patriotism so universally felt both in form and substance. The outside was adorned with a handsome embossed United States flag and within was printed the program with the C. L. S. C. mottoes. Two of our number have traveled in Europe, two are natives of Germany, and one of Russia. These have also much to tell of foreign lands. They bring photographs of famous pictures, buildings, and places whenever reference is made to them in the readings. We are enabled to make a more thorough study of these things and many new ideas are brought out. The last social gathering was given by one of our gentlemen who has traveled quite extensively. The evening passed all too soon in looking at photographs and talking about them, our host explaining many interesting things. An impromptu program of songs and recitations added to the enjoyment of all. A collation of fruit was served. I might mention that refreshments are not allowed at regular meetings. The burden of entertaining is very light, for no one feels under any obligation to do anything elaborate."

CALIFORNIA.—A few ladies in Johannesburg are now taking up the regular Chautauqua work, and although there are few books to be secured in such a small town, they manage to make the meetings interesting.——Twenty-four busy people in Escondido have entered the contest for the year's course with the intention of making the most out of it. They are divided into two sections, the winners to be banqueted by the other side at the end of the year.——"The C. L. S. C. Alumni of California was organized February 2, 1887. In the beginning its members consisted principally of graduates from the Vincent and the Sacramento Circles of Sacramento. Later, graduates from the local Westminster and Westminster-Vincent Circles joined. A few have been received from other localities, as Folsom and San Francisco. Several of the old members have made a practice of coming from Vallejo to attend the annual meetings, a distance of about sixty miles. The possession of a diploma and payment of the annual fee of fifty cents are the only requisites for membership. The objects of the association as stated in the constitution are 'to keep alive the interest in C. L. S. C. work, to encourage undergraduates, and to foster the pleasant memories of the past.' The reunions, of which eleven have been held, are much anticipated and long-remembered occasions. A literary and musical program is given, the business is attended to, and the banquet with its attendant toasts gives opportunity for social good-fellowship, the recall of pleasant memories, and a stimulus to future work. This occasional contact of people whose lines of life are widely separated often has a broadening, correcting, and inspiring influence. Greetings are frequently exchanged with absent members, and with undergraduate circles and kindred societies; and in various other ways the influence of the society has been felt in the intellectual life of the community."

THE SUMMER ASSEMBLIES FOR 1898.

CONNECTICUT VALLEY, NORTHAMPTON, MASSACHUSETTS. This Chautauqua at Laurel Park, near Northampton, Mass., held its twelfth annual session July 12–22. The weather was beautiful throughout save one day. The attendance was the largest in the history of the Assembly. It is taking its place among the best conducted and most prosperous Assemblies in all the land and it is run on true Chautauqua lines. If all who are reading there, who commenced their reading because of inspiration furnished them by the Connecticut Valley Chautauqua, graduate next year, the class will number 150. The Round Tables are full of interest, and class receptions take place each year.

Dr. A. A. Willetts, Rev. S. Parkes Cadman, Jahu DeWitt Miller, Dr. Thomas H. Dinsmore, and Edward Page Gaston were among the lecturers. Much enjoyment was furnished by W. H. H. Murray in readings from his own inimitable writings and a much-quoted lecture on "Our National Policy." There were illustrated lectures by Frank E. Baker, literary lectures by Prof. Homer B. Sprague, and monologues by Edward H. Frye. Prof. J. E. Aborn had charge of the chorus work. The music was furnished by the Schubert Glee Club, Schubert Lady Quartet of Boston, and the Misses Robinson with harp and violin, and Fred E. Hansell, the whistler. Readings were given by W. B. Gane and Mrs. Addie Chase Smith.

The receipts were the largest in the history of the Chautauqua, and broad and generous plans are being laid for next year, with Dr. W. L. Davidson as superintendent.

A special and enjoyable feature of the program was the appearance of Palmer's Band of South African Boys in story and song. It was universally enjoyed.

EAGLES MERE, PENNSYLVANIA. The grounds of the Eagles Mere Assembly are located on the summit of the Alleghanies, at the head of a mountain lake one and a half miles long and half a mile wide. The altitude is about 2,000 feet above the sea level, and the air is dry and bracing. July 13 was the opening day of this season's session, and from that time on numerous good things in the way of entertainment and recreation appeared on the daily program. Among the lecturers who delighted the audiences were Mr. Frank R. Roberson, Dr. A. W. Lamar, Capt. Charles McIlvane, and Dr. Eugene May. Readers, magicians, concert companies, and soloists gave unique and popular entertainments.

Ample provision was made in the educational department for students who wished to continue work during the summer. Seven departments of instruction were organized and conducted by eminent educators.

LEXINGTON, KENTUCKY. The eleventh annual session of this Assembly was held in Woodland Park, its attractive and beautiful home at Lexington, Ky., June 28 to July 9. Some weeks before the Assembly opened the directors generously offered the grounds for the mobilization of the Kentucky troops. It was a generous thing for them to do and this one thing secured for Lexington the encampment of soldiers, which meant much revenue in every way to the city. The fears that were expressed that the soldiers would spoil the grounds for the Chautauqua were without foundation. They left for the South two weeks before the Assembly opened. Then came copious rains and the grounds were never finer than during the session just closed. The reports which had been circulated made the number of tents rented less than in former years, but the attendance throughout was magnificent, and the Assembly closed with the balance on the right side of the ledger. The Chautauqua is struggling with a debt of long standing but the interest is being promptly met and the principal slowly decreased.

Harry V. Richards in illustrated scientific lectures; Alexander Black in picture-plays; C. M. Flowers in impersonations; Philip Matzinger with crayon lectures; Jahu DeWitt Miller, Pres. E. Benjamin Andrews, Col. George W. Bain, Miss Olof Krarer, and Bishop John H. Vincent were among the lecturers. There were delightful literary lectures during the session by Leon H. Vincent, Mrs. A. R. Bourne, and Miss Elizabeth Shelby Kinkead. The coming of Bishop Vincent was an event in the life of the Assembly. He made the Recognition address and presented the diplomas to the graduating class. In the evening one of the delightful receptions for which the Kentucky Chautauqua is so famous was given Bishop Vincent under the shade of the great trees in front of the W. C. T. U. tent. Possibly one hundred sat down to the elegant luncheon. The Schubert Quartet sang, and it was an hour of goodly fellowship. Dr. M. M. Parkhurst gave direction to the biblical exposition and the Ministers' Institute. Mrs. W. F. Crafts was as popular as ever in her Sunday-school work. Madame Cecilia Eppinghausen-Bailey, Miss Sibyl Sammis, the Indiana State University Glee Club, and the Schubert Glee

Club furnished the music, which was of a very high order.

The Fourth of July program was exceedingly attractive. Rain nearly all the day largely affected the attendance. But for that fact Rev. Sam P. Jones and Gov. Robert Taylor would have drawn the largest company of people ever seen in Lexington. Dr. W. L. Davidson was for the seventh season reelected superintendent of instruction, and Mr. Alexander Pearson, a prominent business man of the city, is president. Plans are already being laid for next year.

MOUNTAIN LAKE PARK, MARYLAND. The sixteenth annual session of this famous Chautauqua was held August 3 to 26. So phenomenally large was the attendance that it was with difficulty that accommodations could be secured during the early days of the Assembly. The fear people had of the sea-coast in the early part of the year, when they were making their plans for their vacation, was favorable to the inland resorts and especially the mountains. Mountain Lake Park shared in this increase, and still it was not much beyond that which has been witnessed every year for the past eight years at this resort. There has been a steady growth, until this Chautauqua is recognized as one of the best in all the land. Its location is superb and there is an air of ampleness about everything which visitors greatly enjoy. The Park contains eight hundred acres. The cottages are widely separated; the buildings of the Assembly are scattered about the grounds; there is ample room to breathe and no one is crowded by his neighbors. This is conducive to rest and real enjoyment. This year a splendid system of water works was put in. Sewerage is now being added, so that the sanitary conditions will be perfect. Plans are also being laid for the building of a fine new auditorium, with a seating capacity of from four to five thousand people.

More than two hundred actual students were registered in the twenty-five departments of important school work conducted here under the care of the best instructors out of leading colleges and universities. The Chautauqua next year will be extended to four weeks, in order that the summer schools may have the advantage of a longer session. This year representatives were present from twenty-six states of the Union. The management of Mountain Lake Park are aggressive and are determined to make their resort one of the most superb and sensible summer outing places in America. The moral surroundings are of the very best. No trains stop at the Park on Sunday. It is an ideal place for young people. Next year an attractive athletic park will be added for the purposes of baseball, lawn tennis, and other athletic sports. Golf links will also be established, and the hazards made possible by the Little Youghiogheny, the winding glades, the rocky shores of the lake, will make it an ideal spot for this game.

It would be difficult to outline the magnificent program which was offered during the three weeks of the Assembly. The days were crowded full of the richest things in the entertainment line which the country affords; interesting courses of literary lectures bearing on the English reading of the C. L. S. C. course for next year, given by such persons as Prof. Homer B. Sprague, Mrs. A. R. Bourne, Miss Eva M. Pitts, and others; lectures by Jahu DeWitt Miller, Col. George W. Bain, Rev. Sam P. Jones, Dr. Egerton R. Young; impersonations by Charles Montaville Flowers, Edward H. Frye, and fifty others. The music was of a very high order.

Dr. W. L. Davidson returns for the ninth year as superintendent of instruction. He has been identified with the great growth of this movement at Mountain Lake Park and is bending every energy to make this the monument of his life work.

OLCOTT, NEW YORK. At the Ontario Outing Park Assembly special programs were prepared for the days devoted to the interests of the W. C. T. U., woman's suffrage, prohibition, and the Farmers' Institute.

Concerts and lectures had their share of attention on the program during the Assembly. Among the orators who addressed the visitors were Rev. Quincy Lee Morrow, Rev. Carlos Martyn, Prof. N. N. Riddell, and Rev. C. H. Mead.

PACIFIC GROVE, CALIFORNIA. Nineteen successful sessions of the Pacific Grove Assembly have been held. The attendance this season was the best it has been for many years.

With their usual energy the management, of which Rev. Eli McClish is president and Rev. Thomas Filber the superintendent of instruction, arranged courses of study to meet the demands of many students. This place affords special facilities for the study of botany, marine botany, biology, photography, and cooking. A Sunday-school normal was conducted by Prof. R. R. Lloyd.

The Assembly visitors were favored with lectures by John Temple Graves, Rev. Thomas McCleary, Dr. P. J. Henson, and Rhys R. Lloyd.

The usual exercises were followed on Recognition Day, when several were given diplomas. New readers were enrolled in the Class of 1902.

PIASA, ILLINOIS. The annual session of Piasa Chautauqua Assembly was held July 21 to August 19.

The leading platform speakers were Prof. H. V. Richards, Hon. George R. Wendling, Hon. George W. Peck, Eli Perkins, Prof. N. N. Riddell, Col. John Sobieski, Prof. William H. Dana, John G. Woolley, Dr. E. L. Eaton, and Sam Jones.

C. L. S. C. Round Tables were conducted by Professor Dana and Dr. Eaton. Recognition Day was observed, one graduate of '98, one of '93, one of '95 passing through the golden gate and under the arches. The Recognition address was made by Dr. E. L. Eaton. The class poem was read by Miss Fannie Bowman, and a number were enrolled in the Class of 1902. The Normal Sunday-school class was conducted by Dr. A. P. George. The W. C. T. U. Institute was conducted by Miss Maria C. Brehm, Miss Helen Hood, and Mrs. S. M. James.

Music was a special feature. Mr. Knoll and Miss McNeil, the cornetists, were greatly appreciated, and entertainments were given by Assembly talent and choir under direction of Professors Johnson and Eisenberg. Miss Mabel Coddington, the gifted elocutionist, repeatedly entertained and delighted her hearers. The Prize Quartet contest closed the Assembly.

The grounds were greatly improved, and new cottages were built, with more to be erected this fall. The attendance was better than last season and there are bright prospects for the future.

ROCKY MOUNTAIN, COLORADO. The Rocky Mountain Assembly holds its annual sessions at Glen Park, Col., a beautiful wooded park in the foothills between Denver and Colorado Springs.

An excellent and varied program was arranged for the season. The list of speakers included the names of Dr. A. B. Hyde, Prof. George Cannon, Dr. J. B. Kinley, Rev. O. P. Wright, Dr. Frank T. Bayley, Dr. James B. Gregg, and others equally well known.

Arrangements were made for instruction in Sunday-school normal work, science, kindergarten work, oratory, and physical culture.

RUSTON, LOUISIANA. The seventh annual session of the Louisiana Chautauqua, which closed July 30, marked a season of progress in every department.

In addition to the regular work of the Normal School, there were advanced studies in Shakespeare and Tennyson, conducted by Dr. C. Alphonso Smith, of the Louisiana State University. Classes were also formed in Latin, French, biology, drawing, and Louisiana history.

The work of the Peabody Normal was ably conducted by Prof. J. E. Keeny, Prof. T. H. Harris, Prof. C. F. Findeau, Miss Jessie Wright, Prof. A. G. Singletang, and Miss Bessie N. Russell, who conducted the Model School. Miss M. McIntyre Leary gave two courses in expression.

Evenings were given to Round Table discussions, and increased interest was manifested in C. L. S. C. work for the coming year. The annual Chautauqua address was made by Judge A. A. Gunby. Among the leading platform lecturers were Pres. E. Benjamin Andrews, of Brown University; Governor Taylor, of Tennessee; Prof. A. W. Hawks; Colonel Copeland, and Gen. John B. Gordon.

The president for the ensuing year is Mrs. M. H. Williams, Shreveport, La., and Prof. R. L. Himes is the superintendent of instruction.

Despite the discouragements of the past two years, due to the disasters of drouth and flood, Chautauqua's banner still proudly floats. Long may it wave in the magnolia groves of Louisiana.

ROUND LAKE, NEW YORK. Mr. C. D. Hammond is president of the Round Lake Assembly and Dr. B. B. Loomis is superintendent of instruction. They report a pleasant session of the Assembly, though the attendance was not so large as last year.

Sacred pedagogy, New Testament Greek, sacred oratory, and a school of expression are the departments of instruction which were conducted by able educators.

On Recognition Day Prof. W. G. Ward delivered the address and one received a diploma.

The principal lectures were by Rev. H. A. Buttz, Rev. S. F. Upham, and Rev. William G. Ward. The illustrated and art lectures proved specially pleasing to the Assembly.

SELLERSVILLE, PENNSYLVANIA. The first annual session of the Sellersville Chautauqua Assembly was held from July 18 to July 23. The opening day was celebrated by appropriate exercises. Music was furnished by the Sellersville Mixed Chorus, and the address of welcome was delivered by Chancellor W. W. Woodruff. John R. Clarke, of Buffalo, N. Y., delivered a lecture on "To and Fro in London," and the exercises of the day closed with brief remarks by distinguished visitors.

Those who arranged the Assembly program were careful to secure the best lecture talent the country affords. Among those who addressed the Assembly were Prof. George M. Phillips, Dr. Jesse L. Hurlbut, Rev. W. A. Leopold, Prof. C. B. Cochran, and Dr. Joseph Thomas. There was an abundance of excellent music, both vocal and instrumental, the Chautauqua chorus, conducted by Prof. W. Reiff Nauman, contributing largely to the success of this part of the program.

The Bible normal study and the C. L. S. C. Round Tables were conducted by Dr. Jesse L. Hurlbut.

SHASTA, CALIFORNIA. The third season at Shasta Assembly attracted a larger crowd than did the preceding one. The grounds, located in one of the most picturesque parts of the Sacramento cañon and in a region abounding in mineral springs, offer exceptional advantages in the way of scenery and climate.

At the Assembly there were instructive and entertaining lectures by Rev. C. E. Locke, D.D., Rev.

Thomas McCleary, J. E. Richards, Esq., and Miss Kate E. Whitaker.

Dr. Thomas Filben was the superintendent of instruction.

TULLY LAKE, NEW YORK. The best year in the history of the Assembly is the report that comes from the Central New York Chautauqua Assembly. The C. L. S. C. work, of which Elizabeth Snyder Roberts had charge, was a source of inspiration to many, and a Class of 1902 was formed. On Recognition Day the usual exercises were held and Rev. D. Thomas MacClymount delivered the address.

The leading platform speakers were some of America's best known orators. Among them were Rev. Sam P. Jones, Dr. Thomas H. Dinsmore, Hon. James K. McGuire, A. C. Lindsey, and Rev. C. G. Langdon. The Claflin University Melody Quintet and Signor Bosco, the magician, were popular entertainers.

WILLAMETTE VALLEY, OREGON. At Gladstone Park, Oregon City, the Willamette Valley Assembly held a very successful session and the attendance exceeded that of former years.

An opportunity was given for students to enroll in classes in physical culture, geology, literature, botany, elocution, history of philosophy, teachers' training class, German, kindergarten work, American history, biblical literature, penmanship, and art.

The leading platform speakers were John Temple Graves, Dr. P. S. Hanson, Dr. Bradford, Dr. Hiatt, and Dr. Updyke.

One hour each day was given to the discussion of C. L. S. C. work and other interesting topics in the Round Table meetings. Nine C. L. S. C. graduates received diplomas on Recognition Day.

WINFIELD, KANSAS. At the exercises on Recognition Day at the Winfield Assembly there were the usual procession, the arches, the golden gate, and the presentation of diplomas to thirteen C. L. S. C. graduates. The address was delivered by Dr. Eugene May. The exercises of the day closed with a C. L. S. C. banquet.

In the Round Table meetings a real Chautauqua spirit prevailed and the Lanier program proved specially interesting. A Society of the Hall in the Grove was organized at the close of the last meeting, and several names were added to the Class of 1902.

The Assembly has an educational department well equipped to do thorough work, and this year nine departments were opened to students, that of domestic science attracting unusual attention.

The entertainments and lectures were greeted with rapt attention and many well-known speakers assisted in this branch of the Assembly work. Among them were Hon. W. J. Bryan, Dr. J. B. DeMotte, Rev. Eugene May, Chancellor W. F. McDowell, and Col. L. F. Copeland.

TALK ABOUT BOOKS.

Books of the War.

The recent war has called forth several books of more or less interest which treat of Spain, Cuba, and the war itself. One of these books is "The Spaniard in History," * a short volume by James C. Fernald. It is not a formal history of Spain but an account of decisive events in the national development whereby a good picture of the nation's condition may be obtained.

The revised and enlarged edition of "Spain in History," † by James A. Harrison, is a more pretentious work than the one just mentioned. Twenty centuries of time are covered by the narrative, which is written in a bright, scholarly style, and it includes not merely historical data, but many interesting facts relating to the literature of Spain. The volume opens with an introduction by G. Mercer Adam, who is also the author of the last two chapters, which bring the history down to the present time. Like other works of its kind, it is amply illustrated and contains an index.

Thomas J. Vivian is the author of two volumes in which, in spite of evidences of hasty preparation, the great events of the war are vividly described in a bright, journalistic style. "With Dewey at Manila" * is a narrative of the engagement in the Philippines, including a description of the town and bay of Manila and of the American and Spanish fleets. The illustrations include portraits of naval officers and pictures of the United States battleships. Paper covers encase this volume. "The Fall of Santiago" † is the title of his second book. The chasing of Cervera's fleet, Hobson's exploit, the fighting at Guantanamo, the expedition of the Rough Riders, the destruction of Cervera's fleet, and the surrender of Toral, are some of the events he has chosen to describe. Some excellent pictures are found among the numerous illustrations.

* The Spaniard in History. By James C. Fernald. 144 pp. New York: Funk & Wagnalls Company.

† Spain in History. By James A. Harrison. Introduction by G. Mercer Adam. Revised and enlarged. 631 pp. Akron, O.: The Werner Company.

* With Dewey at Manila. Edited by Thomas J. Vivian. 100 pp.——† The Fall of Santiago. By Thomas J. Vivian. 246 pp. $1.50. New York: R. F. Fenno & Company.

The relation of the Caucasian race to the tropics is the theme of "The Control of the Tropics."* Clearly and cogently the author, Benjamin Kidd, has formulated his arguments, which point out the duty of the English-speaking people, and give us the principle on which a successful development of the tropics depends.

A compilation of essays and addresses by Theodore Salisbury Woolsey is entitled "America's Foreign Policy."† Most of the papers relate to events of the last four years, and in several of them the author discusses in a lucid, forceful way the difficulties with Spain in the light of international law and the policy of the government as exhibited by previous diplomatic proceedings. The Bering Sea and fishery questions, the relation of the Paris declaration to the United States, and the inter-oceanic canal are other topics treated.

"Lights and Shadows of our War with Spain"‡ is a paper-bound volume containing anecdotes and incidents of the war, with descriptions of some of the important engagements. It is largely a compilation and contains two illustrations.

Northward over the "Great Ice."

One of the boldest Arctic explorers, who has done much to advance the interests of geographical, meteorological, and geological science, is Lieut. Robert E. Peary, and an account of his experiences in Greenland are embodied in a work‖ of two large volumes. In 1886 he made a preliminary visit to Greenland to discover the nature of the great ice plateau and to test his theories in regard to equipment and methods of exploration. His real work began five years later, when, accompanied by his wife and several assistants, he landed at McCormick Bay, where winter quarters were established. From this place boat and sledge trips were made, and during the expedition, which lasted a little more than a year, the northernmost part of Greenland was reached. Four subsequent expeditions were conducted by Lieutenant Peary in spite of many obstacles which menaced the execution of his plans. The difficulties of his undertaking he has fully explained, and he has described the country, the people, and the animal life in a clear and comprehensive manner. His recital of experiences in the land of the midnight sun is intensely interesting, and if anything is needed to make the account more effective it will be found in the maps, diagrams, and excellent illustrations, which number several hundred. Each volume is also supplied with an index.

Important Biographies.

With the death of Prince Bismarck a long and successful diplomatic career came to a close. He was identified with some of the most important political events of the century, the history of which has not up to the present time been clearly understood. Now it is quite possible by means of a recently published memoir of Prince Bismarck* to see the reasons for certain hitherto inexplicable diplomatic moves. This work is by Dr. Moritz Busch, who for more than twenty years was connected with Prince Bismarck in an official capacity of the most intimate character. During this period Dr. Busch kept a diary in which he recorded all important conversations with the prince, his views on people and events, with descriptions of his manner of living and working, and many trivialities which make a work of this kind entertaining as well as instructive. Two volumes of some five hundred pages each are necessary to contain the mass of material, much of which is a verbatim report of Bismarck's remarks. The work is therefore of the highest value, being authoritative and opening to the world some of the secrets of the political history of Europe. A half dozen illustrations constitute the pictorial portion of the book and an index closes the second volume.

Justin McCarthy's admirable biographical work which tells the life history of the Rt. Hon. William E. Gladstone,† has been revised and enlarged to cover the last two years of his life, a period which, in spite of his advanced years and failing health, was full of activity. The closing scenes of his life Mr. McCarthy has described forcefully and sympathetically, and the completed story, in the writer's most delightful style, is a valuable commentary on one chapter of English history. The illustrations are numerous and most befitting a work of this kind. In binding and general make-up this volume is like the first edition, which was reviewed in these columns a little less than a year ago.

Fiction.

"Caleb West, Master Diver"‡ is the title of a story by F. Hopkinson Smith. The dominant theme is the construction of a solid

*The Control of the Tropics. By Benjamin Kidd. 101 pp. 75 cts. New York: The Macmillan Company.

†America's Foreign Policy. Essays and Addresses. By Theodore Salisbury Woolsey. 294 pp. $1.25. New York: The Century Co.

‡Lights and Shadows of our War with Spain. Written and compiled by John R. Musick. 224 pp. New York: J. S. Ogilvie Publishing Company.

‖Northward over the "Great Ice." By Robert E. Peary With maps, diagrams, and about eight hundred illustrations. Two vols. 601+639 pp. New York: Frederick A. Stokes Company.

*Bismarck. Some Secret Pages of his History. Being a diary kept by Dr. Moritz Busch. With portraits. 524+593 pp. $10.00.——† The Story of Gladstone's Life. By Justin McCarthy. Second edition, revised and enlarged. 528 pp. $6.00. New York: The Macmillan Company.

‡Caleb West, Master Diver. By F. Hopkinson Smith. With illustrations by Malcome Fraser and Arthur Keller. 378 pp. Boston and New York: Houghton, Mifflin, and Company.

foundation thirty feet under water for a lighthouse on Shark's Ledge, in the vicinity of New York. As the author describes the process the reader instinctively holds his breath, so vividly are the difficulties and dangers of the work set forth. But besides this the writer portrays the life of these workers, who are seamen, as one who knows them well, laying bare the tenderness, the sympathy, the integrity hidden under the rough exterior. In addition to the tragic episode which nearly breaks the heart of the master diver is a secondary play of hearts interesting to study.

A pleasant volume for reading aloud to a company of friends is "Penelope's Progress,"* which describes Penelope Hamilton's exploits in Scotland. Her friends, Francesca and Salemina, who shared in her English experiences, are the congenial companions of her travels in Scotland and they enter thoroughly into the spirit of Scottish town and country life. Mrs. Wiggin's manner of describing the events of the summer, the commonplace as well as the thrilling heart experiences, is charmingly bright and chatty. The unique covers of Scottish tartan are appropriate and suggestive.

He who reads "The Gadfly"† will be unable to throw off at once the spell of its power. In the first few pages a conversation between Montanelli, an Italian priest, and Arthur Burton, an English lad studying in Pisa, reveals the fact that the latter is connected with the organization known as Young Italy. By a combination of unfortunate circumstances Arthur loses faith in religion, Montanelli, and all other friends and leaves the country for South America, returning thirteen years later under the name Rivarez, so transformed that he is unrecognizable. Then as the Gadfly, a nickname well deserved, he takes part in revolutionary schemes which bring him into contact with Montanelli and another friend to whom he was formerly devotedly attached. At this stage in the story the author begins to show real skill in character sketching, and every subsequent incident throws light on this one character, repulsive yet attractive, and sometimes incomprehensible. But it is the climax of the story that contains the most striking example of the author's power. Here in bold, vigorous phrases which yet show a nicety of discrimination are delineated the imprisonment and death of the Gadfly and the remorse of Montanelli, which drives him to madness.

Marshall Saunders is the author of a story which for the sweetness and purity of its principal characters deserves a wide popularity. This tale is a romance of Acadia,* and a greater part of the action takes place on Canadian soil. The hero, Vesper Nimmo, is a Bostonian, and in the garret of his city home he discovers a letter written by his great-grandfather, which sends him off to Acadia on an unusual quest among the French. At Sleeping Water Inn in *L'Eau Dormante* he meets Rose à Charlitte a charming and noble Acadian. This is the beginning of a simple but interesting plot, into which historical events have been skilfully woven and by which the Acadian character has been effectively portrayed.

Mr. Davenant, a self-made man, is the most striking personage in Mrs. Burton Harrison's "Good Americans."† The excellence of his character makes the shallowness and insincerity of the pleasure-seeking devotees of society around him seem greater by contrast. The Grantham family and Miss Carnifen are other admirable actors in a plot sufficiently complicated to arouse the curiosity of the reader. The development of the story involves the delineation of the upper strata of society in New York. A wedding trip abroad is described, making a pleasant diversion from the monotony of the New York round of pleasures.

BOOKS RECEIVED.

GINN & COMPANY, BOSTON.

Wentworth, G.A., A.M. New School Algebra. $1.25.
Wentworth, G. A., A.M., and Hill, G. A., A. M. A Text-Book of Physics. $1.25.
Cæsar's Gallic War (Allen and Greenough's Edition). Re-edited by James B. Greenough, Benjamin L. D'Ooge, and M. Grant Daniell. $1.40.
Wentworth, G.A., A.M. An Advanced Arithmetic for High Schools, Normal Schools, and Academies. $1.10.

THE MACMILLAN COMPANY, NEW YORK.

The Cambridge Bible for Schools and Colleges. A. T. Kirkpatrick, D.D., General Editor for the Old Testament. The Book of the Prophet Isaiah. Vol I., Chapters 1-39. Vol. II., Chapters 40-46. With Introduction and Notes by the Rev. J. Kinner, D. D. Per vol., $1.10.
Chrystal, G., M.A., LL.D. Introduction to Algebra. For the use of Secondary Schools and Technical Colleges.
Nicholson, J. W., A.M., LL. D. Elements of Plane and Spherical Trigonometry. $1.10.
Elmer, Herbert Charles. Studies in Latin Moods and Tenses. $1.50.
Ferguson, William Scott, A. M. The Athenian Secretaries. 50 cts.
Bates, Fred Orlando, Ph.D. The Five Post-Kleiothenean Tribes. Nos. VI., VII., and VIII. of Cornell Studies in Classical Philology. Edited by Benjamin Ide Wheeler, Charles Edwin Bennett, and George Prentice Bristol.

THE PENN PUBLISHING COMPANY, PHILADELPHIA, PA.

Dumont, Frank. The Cuban Spy. A Comedy Drama in Four Acts. Paper.

THE PETER PAUL BOOK COMPANY, BUFFALO, N. Y.

Doran, James. In the Depths of the First Degree. A Romance of the Battle of Bull Run.

THE VOLTA BUREAU, WASHINGTON, D. C.

Bell, Alexander Melville. Sermon Reading and Memoriter Delivery. Paper, 25 cts.

SILVER, BURDETT & COMPANY, NEW YORK, BOSTON, CHICAGO.

Arnold, Sarah Louise, and Gilbert, Charles B. Stepping Stones to Literature. A Reader for Seventh Grades. 60 cts. A Reader for Higher Grades. 60 cts.

---

* Penelope's Progress. By Kate Douglas Wiggin. 268 pp. $1.25. Boston and New York: Houghton, Mifflin and Company.

† The Gadfly. By E. L. Voynich. 373 pp. New York: Henry Holt and Company.

* Rose à Charlitte. By Marshall Saunders. Illustrated by H. De M. Young. 516 pp. $1.50. Boston: L. C. Page and Company.

† Good Americans. By Mrs. Burton Harrison. 220 pp. $1.50. New York: The Century Co.

DYSPEPSIA

Horsford's Acid Phosphate reaches various forms of **Dyspepsia** that no other medicine seems to touch. It assists the weakened stomach, and makes the process of digestion natural and easy. **Pleasant to take.**

For Sale by all Druggists.

Enameline

is perfectly ODORLESS, and that is another reason why it is the Modern Stove Polish. You will not have to move out of the house until it "burns off," if you use Enameline. "My stove shines in the night," a lady writes. Put up in paste, cake or liquid form. No other has so large a sale.

J. L. PRESCOTT & CO., New York

Huyler's
COCOA AND CHOCOLATES
Quality & Flavor Unexcelled
SOLD AT OUR STORES & BY GROCERS EVERYWHERE
Ask for Huyler's -Take no other.

foundation thir
on Shark's
the auth
stinctive
culties
sides
ex

ROYAL BAKING POWDER

Absolutely Pure

Made from most highly refined grape cream of tartar.

Makes pure, delicious, wholesome food.

ROYAL BAKING POWDER CO., NEW YORK.

IVORY SOAP

Will not cause the skin to roughen or crack

"Contains as much flesh-forming matter as beef."

Walter Baker & Co.'s Breakfast Cocoa

TRADE-MARK.

"Has stood the test of more than one hundred years' use among all classes of people, and for purity and honest worth is unequalled."
—*Medical and Surgical Journal.*

Costs Less Than ONE CENT a Cup.
Our Trade-Mark on Every Package.

Walter Baker & Co. Ltd.
DORCHESTER, MASS.

One thousand styles and sizes.
For cooking and heating.
Price from $5 to $70.

Often imitated. Never equalled.

Best Cookers. Strongest Heaters.
Last Longest. Use Least Fuel.

Made only by
The Michigan Stove Company
Largest Makers of Stoves and Ranges in the world.
Sold Everywhere.

VOL. XXVIII.
No 3.

DECEMBER, 1898

THE CHAUTAUQUAN

HARVARD COLLEGE LIBRARY
NOV 30 1898
CAMBRIDGE, MASS.

CHRISTMAS

VOL. XXVIII. DECEMBER, 1898. NO. 3.

THE CHAUTAUQUAN

A MONTHLY MAGAZINE.

.....CONTENTS.....

Madonna and Child ..... *Frontispiece*
The Nativity ..... *Frontispiece*

REQUIRED READING.

The Immensity of London. Illustrated ..... *John Gennings.* 219
Telegraphs and Telephones ..... *Charles Barnard.* 227
Sir Robert Peel ..... *Prof. H. Morse Stephens, M.A.* 231
The Human Life of God ..... *Henry Van Dyke, D.D., LL.D.* 235
The Central Element of Organized Matter. I ..... *Prof. L. H. Batchelder, A.M.* 239
Factory Life and Legislation in England ..... *A. M. Anderson.* 243

GENERAL READING.

Woman's Work in the War. Illustrated ..... *Etta Ramsdell Goodwin.* 249
The Education of Boys in Italy ..... *Margherita Traube Mengarini.* 257
The Barrys. A Story. Chapters III.–V. ..... *Shan Bullock.* 261
Irritability and Movement ..... *Wilhelm Haacke.* 276
The Present Condition of France ..... *Bishop H. W. Warren, LL.D.* 280
The Socialist Propaganda in Germany ..... *Edgar Milhaud.* 284

HISTORY AS IT IS MADE.

November Elections; The Peace Commission at Work; New Political Figures; An Indian Outbreak; Labor Conflict in Illinois; Whites vs. Blacks; Dreyfus Case Revision; Fashoda; Emperor William's Pilgrimage; Church Movements; Important Court Decisions; Col. George E. Waring; Obituary. Illustrated 289

C. L. S. C. WORK.

C. L. S. C. Outline and Programs 297
Syllabus of C. L. S. C. Reading 298
The C. L. S. C. Classes 305
Local Circles 308
New England Assembly 310
To Non-members of the C. L. S. C. 322
The Chautauqua Literary and Scientific Circle 324
The C. L. S. C. Class of 1902 326
The C. L. S. C. Graduate Courses 328
Chautauqua Young Folks' Reading Union 330
Talk About Books. Illustrated 311

DR. THEODORE L. FLOOD, Editor and Proprietor, Meadville, Pa.

NEW YORK, Bible House.
LONDON, Kegan Paul, Trench, Trübner & Co., L't'd, Paternoster House, Charing Cross Road, W. C.
DUNDEE, SCOTLAND, Rev. Donald Cook, 6 Albany Terrace.

Entered According to Act of Congress, December, 1898, by THEODORE L. FLOOD, in the office of the Librarian of Congress Washington, D. C.

Yearly Subscription, $2.00.

From the painting by Grosse.

MADONNA AND CHILD.

From the painting by Carl Müller.

THE NATIVITY.

THE CHAUTAUQUAN.

VOL. XXVIII. DECEMBER, 1898 No. 3.

HARVARD COLLEGE LIBRARY
NOV 30 1898
CAMBRIDGE, MASS.

OFFICERS OF THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

JOHN H. VINCENT, *Chancellor*, 613 Mooney Building, Buffalo, N. Y. All "personal" letters should be so marked on envelope. LEWIS MILLER, *President*. JESSE L. HURLBUT, *Principal*. *Counselors:* LYMAN ABBOTT, D. D.; BISHOP H. W. WARREN, D. D.; J. M. GIBSON, D. D.; W. C. WILKINSON, D. D.; EDWARD EVERETT HALE, D. D.; JAMES H. CARLISLE, LL. D. MISS K. F. KIMBALL, *Executive Secretary*. A. M. MARTIN, *General Secretary*.

REQUIRED READING FOR THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

THE IMMENSITY OF LONDON.*

BY JOHN GENNINGS.

THE BRITISH MUSEUM.

IN his last great work Émile Zola frequently raves about what he terms "the immensity" of Paris. The main action of the story takes place in a house on the summit of Montmartre, close to the great Church of the Sacred Heart, from which one obtains a truly superb view of the glorious city far below. I have often looked upon that fair scene, and I have attempted to describe it, but, somehow, it has never occurred to me to regard it from the point of view of its unlimited extension. Here, in my house on the top of a hill higher than Montmartre, from my study window, I gaze down upon London, and the thing which strikes me with irresistible force is the immensity of the panorama—immensity of area, of population, of wealth,

*The Notes on the Required Reading in THE CHAUTAUQUAN will be found following those on the books of the course, in the C. L. S. C. Department of the magazine.

THE FOREIGN OFFICE, FROM ST. JAMES' PARK.

of poverty, of joy, of suffering. If mortal eye could take in the vast whole at one glance, which is impossible, it would see three thousand miles of streets and six millions of people. It would see property of such stupendous value that the insured portion of it alone is valued at $4,294,497,045, while something like $6,500,000 are spent every year in protecting it against the criminal classes, of whom nearly 150,000 members yearly come before the courts of justice. It would see an area of 121 square miles, wherein at any given moment may be seen 13,000 lunatics, 6,000 imbeciles, and 105,000 paupers, all maintained at the public expense, and wherein every year 136,000 children are born and more than 80,000 persons die. These are some of the figures which ought to bring home to the minds of my readers that which I wish to implant in them—the material immensity of London, the imperial city which is twice the size and has double the population of Greater New York. Compared with New York London has twice as many policemen, four times as many children under education in the public schools, more public libraries, and nearly four times as many habitual paupers.

London is in sober truth a mighty city, and it is an unwieldy monster withal. Until ten years ago it had no municipal life properly so-called. It was governed, save for one tiny portion of it, in haphazard fashion, and even at this moment it could learn much from New York. Thanks to the opposition of the imperial Parliament and government, London is not allowed to furnish its citizens with either gas or water, and every right which it enjoys has been wrung from a jealous and reluctant House of Commons.

In 1888 the chief governing body of London was the Metropolitan Board of Works, the members of which were elected by local bodies known as "vestries," in whom were vested such purely local work

THE CARLTON CLUB.

as street-cleaning and the like. It was a cumbersome system, leading inevitably to financial corruption and various forms of maladministration. Ten years ago the exposure of scandals in connection with the Metropolitan Board of Works compelled the then Conservative cabinet to grapple with the difficult problem of London government. The result, in brief, was the passing by Parliament of a bill constituting the London County Council, to which body was entrusted the government of the whole of the vast metropolitan area, with the anomalous exception of that one square mile of ground which is known as the "City of London" to the confusion of even the most intelligent of foreigners. The average foreigner when he reads of "the Lord Mayor and Corporation of the City of London" naturally supposes that they are the governors of the metropolis as a whole and the freely elected representatives of its citizens. The fact is that, despite his high-sounding title, the lord mayor rules over only one square mile of London. But what a square mile it is! It contains the Bank of England, the headquarters of all the banking, financial, and assurance corporations, the mint, the stock and produce exchanges, and London's only cathedral. It is the center of nearly every trade and industry in the British Empire, and the financial heart of the world. It is beyond comparison the richest square mile of territory in the universe. The rental value of the land upon which its buildings stand is estimated at over $30,000,000 a year, and the vaults and strong rooms of its banks never at any given moment contain less than $400,000,000 worth of specie.

COL. HORATIO D. DAVIES, M. P.
Lord Mayor of London.

The government of the city of London is a limited democracy, regulated by charters granted by various kings and queens, the first of the series being rather more than seven hundred years old. The general body of citizens elect the Common Council, the councilors elect the aldermen by open voting at the polls, and they choose a lord mayor every year by show of hands in general assembly in Guildhall, subject to the veto, rarely exercised, of the court of aldermen. In days gone by the lord mayor, aldermen, and common councilors of the city of London defended their privileges against kings and nobles, either by sword or by purse. In these modern days they have strenuously opposed every reform which seemed calculated to improve the government of that Greater London which has been growing around them with ever-increasing rapidity and virility. Their opposition was uniformly successful until ten years ago, and even when the County Council was created for the government of Greater London the city persuaded Parliament to exempt its square mile from the control of the new body. Thus we have the anomaly of a dual system of government in the capital of the British Empire. This state of things cannot last much longer, for the County Council has gained

the confidence of the people for good work well done, and its power is increasing, while that of the lord mayor and Common Council is on the decline. In its earlier years the County Council, with the enthusiasm and indiscretion of youth, tried to do too many things at a time, and needlessly interfered with matters which at that time were best left alone. But to-day, while still conserving the generous spirit and lofty ideals of early manhood, it possesses the wisdom and tact of middle age.

BUSINESS AND PLEASURE.

The County Council electorate consists of occupiers of dwelling-houses or tenements irrespective of rated value, and of offices or business premises rated at not less than fifty dollars annual value. Women who occupy houses in their own right and members of the House of Lords, both classes debarred by statute from the parliamentary franchise, can vote for county councilors. The elections are conducted on the principle of one man one vote. No man can vote twice within the county at any particular election, although he may have property qualifications in a dozen different places. The County Council consists of 118 members elected for three years, and nineteen aldermen elected by the Council for a term of six years. Unlike the lord mayor, the chairman of the County Council has no honorary appellation by virtue of his office, but he is usually knighted by the queen. Only one member of the County Council, the deputy chairman, is paid a salary, yet all the councilors work hard, and their responsibilities are extremely onerous. Little is heard of this work, for it is nearly all done in the various committees, which meet about 1,600 times in the course of the year, and only once a week does the Council meet in open session, where ambitious men may air their eloquence before the reporters.

The population of Greater London is estimated to-day to be rather over 6,000,000, but the population of the administrative county of London, over which the Council directly governs, is 4,500,000, and there are about 600,000 buildings to accommodate this vast horde. The County Council stands to the multitude almost *in locus parentis*. It looks after their health and comfort in various ways, maintains the main drainage system, controls and maintains the fire brigade, which, by the way, is not more than half the strength of that of New York, maintains most of the bridges, makes by-laws respecting public health for the guidance of the local bodies, appoints coroners and maintains coroners' courts, controls and maintains parks and open spaces (except the royal parks, which are nominally the property of the crown), maintains and provides asylums for lunatics, licenses theaters and variety halls, tests and stamps weights and measures, provides dwellings for artisans and laborers, licenses and inspects dairies, cowsheds, and milk-shops, keeps a sharp eye and sensitive nose upon slaughter houses, knackers' yards, soap and tallow-melting, fat-melting and blood-boiling businesses, and other offensive trades, and supervises common lodging houses. No duty in respect to the physical well-being of its 4,500,000 constituents is

too small for the Council, and yet in regard to the more strictly moral welfare of its people it is absolutely powerless, with the result that vice flaunts itself brazenly in the public streets to an extent absolutely without parallel in any other place in the civilized world.

The vestries and district boards still exist and possess most of the powers which they enjoyed under the old Metropolitan Board of Works, and they will probably find a place in any system of London government, owing to the vastness of the metropolis. Their members are elected upon a restricted suffrage annually, and they do much useful work without unnecessary fuss. The vestries deal with sewerage and drainage apart from the main drainage, which the Council looks after. They remove refuse, provide mortuaries, see that proper notification is given by the medical authorities of infectious diseases, enforce the law relating to the adulteration of foods and drugs, pave, cleanse, maintain, light, water, and scavenge the streets, deal with all public nuisances, look after the sanitary condition of bakeries and workshops, prevent overcrowding and enforce sanitation in the dwellings of the poor, enforce the law against the owners of insanitary dwellings, provide public baths, wash-houses, libraries, cemeteries, and so forth.

The vestries elect the members of the Metropolitan Asylum Board, which provides hospitals for infectious diseases and asylums for lunatics, and members of the Boards of Guardians, who control the administration of public relief and provide so-called work-houses for the accommodation of the destitute poor. Finally, there is the London School Board, directly elected by the people every three years, which has under its absolute management and control five hundred public schools.

ROTTEN ROW.

Perhaps the two duties most important in their relation to the public health performed by the County Council are those of the construction and maintenance of the system of main drainage, and maintenance of parks and open spaces. The main drainage system is a stupendous one, carried out at a capital cost of $38,846,465. Within the memory of living men the whole of London's sewage was cast in the river Thames, making that fine stream the foulest stretch of water in the world. Just thirty-two years

ago the gigantic work was taken in hand by the Metropolitan Board of Works, and it may now be said to be completed. The County Council has in its charge 284 miles of main sewers, to maintain which it has in its permanent employment a staff of a thou-

A LONDON FIREMAN.

sand men. The main sewers average nine feet in diameter and they convey the 210,000,000 gallons of drainage water and sewage which mighty London produces every day to a great pumping station at Abbey Mills, in the east of London, and thence to two immense outfall stations at Barking, twelve miles further down on the northern side of the river, and to Crossness on the southern side, twenty miles from the metropolis. At Barking and Crossness the sewage is treated by precipitation. Last year eighty thousand million of gallons of sewage were dealt with at the two stations, and this prodigious quantity yielded by precipitation 2,250,000 tons of sludge, which was taken in the Council's fleet of steamers fifty miles out to sea and deposited on the bed of the ocean. The remainder, bright odorless liquid, was discharged into the river Thames. It required 28,000 tons of lime and protosulphate of iron to precipitate this sewage, and the cost of maintenance of the two outfall stations was nearly half a million dollars for the year. Unlike Paris, London does not make a show of its mighty sewers, which seems a pity, for if the citizens could visit these underground marvels they would be able to realize that they get good value for the millions which, more or less cheerfully, they have provided for the mammoth work.

London on the surface is not less cared for than London underground. As already explained, the streets are under the charge of the district boards and vestries. The system is not altogether an ideal one but it has its advantages. It tends, for one thing, to promote and encourage emulation among the various local bodies, with the result that the streets of London are probably better kept than those of any other city in the world. There is, moreover, plenty of variety, which a good many people consider pleasing. Some local bodies pin their faith upon Australian hard jarrah wood for paving the roads, others prefer the old-fashioned stone cobbles or granite blocks, and a few swear by asphalt. In the short run of three miles from Victoria in the west to Aldgate in the east the inquiring stranger will find all these varieties of roadway and all the best of their kinds. Those three famous thoroughfares, the Strand, Fleet Street, and Ludgate Hill, for instance, are paved with jarrah wood as carefully laid as a parquet floor, while most of the streets in the heart of the city of London, including historical Cheapside and the space opposite the Royal Exchange and Mansion House, across which 1,900 vehicles sometimes pass in a single hour, are laid with asphalt as clean and smooth as the surface of a ballroom.

Twenty years ago London, for its size, was worse off than many provincial and foreign cities in the matter of parks and open spaces, but there has been a vast improvement since that time. Even in the

THE THAMES EMBANKMENT AND ST. PAUL'S CATHEDRAL.

matter of parks there is a dual system of management. Some of the larger open spaces, such as Hyde Park, Kensington Gardens, Regent's Park, Greenwich Park, and Kew Gardens, belong to the crown, are controlled by Her Majesty's commissioner of works, and looked after by men who wear the royal livery. But of the total area of 6,122 acres of parks and open spaces, 4,267 acres are in the capable hands of the County Council. Of this total 366¼ acres are metamorphosed ancient churchyards and other tiny spaces mostly situated in densely crowded districts and therefore of a value and importance out of all proportion to their actual size.

It used to be said, and with much truth, that the tavern was the London working man's club. A restless man had no other place in which to spend his evenings except the street or in too many cases the not more cheerful "home." The tavern-keeper catered for the working man, provided comfortable rooms for him, and allowed him to pay for his beer on the weekly pay-day instead of insisting upon cash down. The arrangement was a good one for the liquor-seller and for nobody else, and very gradually Parliament made its continuance impossible. Acts were passed forbidding the saloon-keeper from giving credit for liquor supplied, games of chance on licensed premises were prohibited, and any tavern-keeper permitting betting in his house ran very grave risk of losing his license, and with it his means of livelihood. These restrictions led to the establishment of clubs for working men, for such institutions are exempted from the iron regulations imposed upon the professional liquor-seller. In his club the working man is in the eyes of the law in his own home. He can keep the place open every hour of the twenty-four if he cares to do so, and can drink liquor all the time. Jack, in fact, is as good as his master; the working man's club is equal before the law to the palatial establishments in the West End of London, where princes and nobles and plutocrats get drunk, or ruin themselves at play, or find social and intellectual recreation. The acquisition of the knowledge of these facts was a great and glorious discovery for the horny-handed son of toil, and he went into the club business with enthusiasm.

ST. JAMES' PARK.

Following upon this discovery by the working man the political party managers found that clubs kept interest alive and formed useful centers of work. Temperance reformers also found it necessary to establish clubs, and the aggregate result is that London is now studded over with hundreds of these institutions, and that there is no self-respecting artisan who does not belong to one or the other of them. They have become an integral part of the daily life of the toiler in London, just as the Carlton, the Reform, the Devonshire, the Athenæum, the Constitutional, the National Liberal, the Army and Navy, the United Service, have long been institutions without which the aristocracy and the wealthy middle class of the metropolis would doubtless pine away and die. All the great clubs just enumerated, with many more, are situated within a radius of half a mile from Charing Cross, and all are palaces within and without.

London is, in truth, immense to-day both in wealth and in poverty. The ratable value of its buildings is nearly two hundred million dollars, and the bare land upon which those buildings stand is worth seventy-five

PICCADILLY.

million more, yet there are at this moment 105,000 persons in the poorhouses so absolutely destitute that they have to be fed, clothed, and lodged at the public cost. So vast is the mass of disease and suffering that 130 hospitals are required to cope with it. The imagination almost recoils from the thought of what will be the immensity of London fifty years hence. The mighty metropolis is even now growing at the rate of 45,000 persons and 15,000 houses every year, but with this increase there is a concurrent improvement in the moral and material welfare of its people. During the past twenty-five years the mortality from typhoid fever has decreased from 374 to 135 per million; sixty years ago 300 persons out of every million died of typhus, while to-day the mortality from that disease is less than one per million; in the days of Queen Elizabeth the death-rate in London was 80 per 1,000; to-day it is about 18 per 1,000. There is comfort in these figures. They justify the belief that the London of the future will be a brighter and healthier and happier London, and therefore those who love the mighty imperial city may regard its stupendous expansion with equanimity and watch its growth with pride unmixed with fear.

TELEGRAPHS AND TELEPHONES.

BY CHARLES BARNARD.

THE first telegraphic message was in these words: "What God hath wrought." The reverent sender wrote with larger meaning than she knew. What has been wrought is almost past understanding. So great is it that it seems providential—the very handiwork of God in history. It is difficult for the present generation of young people to grasp the conditions of sixty years ago, when all information had to be carried by man or horse or boat. Signaling by flags, lights, semaphore arms, by fire and smoke, and messages by birds were known, but all were limited in range and expression. Until the introduction of railroads there was no practical way of sending definite information any faster than a horse could run or a boat

sail. The railroad made it possible to send a letter faster—and that was all. The United States post-office is to-day the most perfect system for carrying written information ever devised, and yet Boston is six hours from New York, Chicago a day to the West, San Francisco five days distant, Puerto Rico is five days, and Manila twenty days from New York.

With the telegraph and telephone every man and woman in the United States who can reach an office, and that practically means the entire population, can within two hours communicate with any other man or woman in the country. In the limits of any town or city this can be done within two minutes, often in ten seconds. What does this rapid transmission of information mean to the individual or the community? First, it means safety—personal security. Does the greatest danger of our lives threaten? The telegraph instantly calls to the aid of the individual all the resources of the fire department, police, and ambulance service. It is the instant help that counts. It is the moral effect of telegraphic speed in calling for aid that deters the would-be burglar and house-breaker.

What is true of the individual is true of the community. In case of riot, fire, disaster of any kind, every town is in instant call of every neighboring town. Does any state need help? Every state in the Union knows it the same day. Nations are in sympathetic touch with every nation the wide world over. In like manner all trades, arts, and manufactures are in immediate communication. A comet discovered through one telescope may be watched by fifty the same night. The rise and fall of prices in every market is known the same day in all markets. The cargo at sea is sold between ports. The night editor of a city newspaper knows all that has happened of importance in the world in the past ten hours. In six hours more his readers know all of it that will interest them.

When the telegraph was first introduced its messages were received with apprehension. The strange envelope seemed always to contain news of sudden death. It took some time for this to disappear, because the cost of telegraphing was so high that it was only used in case of necessity. As the cost was reduced messages became commonplace, even trivial, and they were received with about the same feeling that attends the opening of a business letter. Then came the telephone. This, too, in time, became cheaper, and, as a result, of more general use. At first, a telephone call meant most urgent and important business. Now it may mean a call for the laundry woman, an invitation to dinner,or an inquiry as to the baby's teething. It is safe to say that to-day the greater part of all business is done by wire. The preliminaries, the details may be by letter or interview—the conclusions of business are by telegraph or telephone. Shopping, ordering of materials, orders for work to begin or stop, emergencies in work or construction are all in greater or less degree done by wire.

What is the effect upon the individual of these conditions? The sense of dread has completely disappeared. There is a sort of tacit recognition that telegrams and calls to the telephone take precedence over other business communications, but this is all. On the other hand, business conditions are absolutely and completely changed. Once the merchant saw his ship sail away and went home knowing that he would hear nothing from her for six months. He could do nothing but trust in the captain and wait. To-day there is no waiting. Everything is now. To-day is the important day. Uncertainty has given place to complete knowledge. Things move and the man must move too—or be left.

The result is that business is concentrated, condensed, instant, and immediate. There is no time to think—action is what is wanted. Business is concentrated to a focus during business hours. Thinking and planning must be done beforehand. The result is that business hours are shortened, work is rushed, things are settled and done quickly, promptly. The facilities being instantaneous the work must be rapid. If these conditions had come suddenly the effect upon the physical and mental health

of the people would have been disastrous. Fortunately, they came slowly and people had time to be trained to the new facilities for doing business. The training is not finished yet. It is evident that the younger generation of business people are more active, quicker to decide, more attentive, shorter and quicker in speech, without being less amiable. The brevity of the telegram trains to conciseness of speech. The hurry of the telephone drills in economy of words. Business being rapid is condensed into fewer hours and with longer rests between days. This is an advantage on the ground that when you work—work, when you play—play.

One of the most remarkable things about the telephone is the recent enormous extension of its field of usefulness. In 1884 there were 325,574 telephones in use. In 1894 there were 582,506. So far the increase had been slow. After that it increased rapidly. In 1895 there were 674,976; in 1896, 772,627, and the last report of the American Bell Company places the number on January 1, 1897, at 919,121. In 1885 there were 772 telephone exchanges, and the line-wires were 101,592 miles long. In 1895 there were 867 exchanges and 396,674 miles of line-wire, 148,285 miles being underground. On the 1st of January, 1897, there were 1,025 exchanges, with 626,400 miles of line-wire, 282,634 miles being underground and 2,675 miles in cables under water. In 1895 this company had 5,168 employees. In 1897 it gave employment to 16,682 men and women. In this one company there are every day over 3,000,000 "talks." This company does the larger part of all the telephone business of the country. There are, also, many other smaller companies and private lines. The general government also owns and uses over a thousand miles of telephone lines. It is not possible to get the total telephone mileage in the country, yet it is known that the total is increasing continuously and rapidly. There are, no doubt, over one hundred thousand telephone messages every day in the week.

The most recent extension of the telephone has been into the country, bringing the farm in reach of the town. Before he had a telephone the truck farmer or fruit-grower loaded up his team with a miscellaneous assortment of his produce and drove to town, trusting to luck to find a good market and fair prices. Now he ascertains the state of the market and its tone before he starts. He even sells his crop in advance and only delivers what is wanted. The telephone has made farming profitable by removing uncertainty. It also tends to equalize prices, to prevent ruinous gluts and famine prices for articles of general consumption. Its use by the farmer is shown in the greater uniformity of prices in the retail markets and it has stopped the foolish haggling over prices that is such a common feature of European retail markets. The supply and price of fish, vegetables, fruit, flowers, and other articles of daily consumption is now almost entirely controlled by telephone. The telephone has thus become the balance wheel of trade throughout the country, preventing alike local gluts and famines.

The progress of the telegraph has been equally remarkable. Taking the records of the Western Union Company as a fair guide for the last thirty years, we find that in 1866 there were in this country 2,250 telegraph offices, operating 75,686 miles of wire. There is no report of the number of messages for that year, but, beginning in 1867, we have very interesting data concerning the business of telegraphy. In 1867 there were 2,565 offices and 85,291 miles of wire, a trifle over two wires to a pole or in a cable. The number of messages sent were 5,879,282, but the average cost to the sender was over a dollar. The profit to the company was very large in proportion to the business. In ten years the number of offices had increased more than three times, while the length of lines had only a little more than doubled. The number of messages increased nearly three times, but the poles carried only two and a half wires each. The average cost of a message had dropped more than one half, though the cost of handling was still very high.

During the next ten years there was an enormous increase in the volume of business and the facilities for handling it. In 1887 the number of offices was 15,658. The mileage was 524,641, with a little more than four wires to a pole. The number of messages was 47,394,530. The cost to the sender was about thirty cents and the margin of profit was very small. In 1897 there were 21,769 offices employing 841,002 miles of wire. The general demand for underground wires in cities had raised the number of wires to a pole or cable to five. There were 58,151,684 messages and the average cost was about thirty and a half cents, the margin of profit remaining small. The volume of business in the thirty years since 1867 has increased eleven times, and the wire mileage has increased ten times, while the convenience to the public (offices) has increased eight times. This means that this company has covered ten times as much country, or nearly so, the proportion of wires to a pole having also increased. That the increase of convenience has not been greater can, no doubt, be explained by the fact that much of the wire mileage increase is in cities. With all this increase the cost per message has been reduced seventy per cent. This most interesting showing only tends to prove that facilities for business create business and that increased business reduces the cost of the service rendered. Incidentally it proves that our people are quick to adopt improvements that save time, labor, or money.

This report does not, however, cover the entire field. The Postal Telegraph Company has in operation 2,558 offices, with a wire mileage of 128,091, and there is every reason to think that it does a large business at equally moderate rates. In addition to these two great companies there are a large number of small companies or private lines. The railroads employ thousands of miles of wire and the government also operates military and other lines. The grand total of wire communication by telegraph or telephone in this country probably now exceeds one million five hundred thousand miles.

Certain persons of a classic turn of mind, and whose knowledge of Greece and Rome is apparently greater than their knowledge of the United States, have expressed grave fears as to the future of this nation. Recently they have bewailed the increase of our territory. They have feared the country would fall to pieces of mere bigness. It might do so had we no telegraphs. The telegraph and telephone practically make the whole country no bigger than one of the seven hills of Rome. There seems to have been, at times, some difficulty in conveying information even a few blocks in ancient Rome. To-day every breakfast table, with a very few exceptions, may know everything that has happened of any importance during the night in every town between Ponce and Eastport, Me., on the East and the Pacific on the West. The opinion of the nation is every day, almost every hour, known at the White House. We are one people because we can think together. Roman history might have been different if Julius Cæsar had had a telephone. This nation is bound together with a live wire—alive with the thought, feeling, and will of seventy million people who are all in instant touch with all. On this rests the safety of the republic.

The effect of the telephone and telegraph upon the people has been everywhere for good. The children in school once studied the useless history of dead peoples. To-day they study current history as it is made from day to day. The newspaper may not be in Addisonian English, but it is a fine textbook in making men and women. Even religious thought has been broadened and quickened by this instant touch with all the world. We have just seen a war from day to day, present by wire at every victory. Waterloo was not known in London for days afterward. New Orleans was a battle after the war was over. Manila and the awful week of suspense have taught us what it is to be without wire connection.

Telephone and telegraph are both educators. They have trained and are training our people to new ways of doing business. They have materially changed social life on

the farm and in the small town. The people without them must be out of the game. Here they began and here they have been most wonderfully improved. All the world comes here to learn the twin arts. Our methods, our exchanges, offices, our plants, are the model for the world, and nowhere has there been such progress as here. A traveler who had lived for many years in Greece recently landed in New York. On reaching his hotel he asked for pie. Why? "Because," he said, "I have just come from a benighted country that has neither pies nor telephones."

SIR ROBERT PEEL.

BY H. MORSE STEPHENS, M. A.

PROFESSOR OF MODERN EUROPEAN HISTORY IN CORNELL UNIVERSITY.

THE passing away of the greatest and most conspicuous of the disciples of Sir Robert Peel has called forth a greater interest than has been expressed for many years past in the character and career of the second prime minister of Queen Victoria. Mr. Gladstone was profoundly influenced by the great statesman under whom he first served as a member of an English cabinet. In a masterly sketch of Mr. Gladstone's political character Mr. James Bryce clearly pointed out the effect of Peel's influence upon his more youthful colleague. It was from Peel that Gladstone learned the secret of successful financial administration; it was from Peel that he learned how to understand and to lead the House of Commons; it was from Peel that he learned the even more valuable lesson that iron consistency is not the only moral quality that deserves respect and that it is more noble for a statesman to acknowledge that he has made mistakes of judgment, even though the acknowledgment lay him open to accusations of levity and insincerity, than to persist in a mistaken course in order to preserve a reputation for inflexibility. For many years after the death of Sir Robert Peel Mr. Gladstone remained the most conspicuous member of the little knot of so-called "Peelites," and to the end of his long life he cherished and venerated the memory of his former leader.

It is not only because Peel and Gladstone stood to each other in the relation of teacher and pupil in politics that their names must ever be associated in the history of the Victorian era. They were, further, in a more general fashion the first and the second representatives of the type of English statesmen which has especially flourished in the nineteenth century. In the eighteenth century England was under the rule of an oligarchy first of birth and landed property and later of wealth; in the twentieth century England must be a democratic country; in the interval of transition, which is clearly marked by the monopoly of the franchise by the middle classes between the Reform Bills of 1832 and 1886, England has been neither an oligarchy nor a democracy, but under the control of the middle classes. It is not surprising, therefore, to find that the two most distinguished statesmen of this transition century belonged by birth to the class of great employers of labor who made their wealth in the heyday of England's industrial and commercial supremacy.

Sir Robert Peel's father was a wealthy manufacturer who made his fortune in the days following the revolution introduced by the use of machinery; Mr. Gladstone's father was a wealthy Liverpool merchant and an owner of West Indian estates. Both fathers were ambitious for their gifted sons and gave them the educational advantages which had a century earlier been among the privileges of the aristocracy. Peel was sent to Harrow School and Gladstone to its most famous rival, Eton College. Both were distinguished among their school fellows and proceeded in due time to Christ Church, then the leading college at Oxford. Both obtained the crowning academic dis-

tinction of a double first class in honors and immediately afterward entered the House of Commons with a university reputation for ability which was in itself the most favorable introduction to public life. It is not to be wondered at, therefore, that the younger man should have followed closely in the footsteps of his senior and that it should be impossible to interpret aright the career of Gladstone without understanding that of Sir Robert Peel.

Peel was born in 1788, and it was in 1809, the year of Mr. Gladstone's birth, that he entered the House of Commons. The two great figures at that time in English parliamentary life were Robert, Lord Castlereagh and George Canning, the last of great English aristocratic and the first of great English democratic statesmen. The two had been secretaries of state in the Duke of Portland's cabinet and their irreconcilable differences in character and policy had in the year Sir Robert Peel entered public life led to the famous duel which caused both for a time to retire from office. But though out of office, the Tory, or, to speak more accurately, the "Pittite" party, which controlled the government by a great majority in both Houses of Parliament, looked to them as its leaders. Castlereagh was an aristocrat to his finger-tips; he haughtily despised public opinion and believed that he and his friends understood better the duties and the interests of England than the people; he was a punctual, laborious, and able administrator, despising sentiment and esteeming only the logic of facts; he had neither eloquence nor personal magnetism, but his unswerving devotion to his country and his masterful desire to promote her greatness, even in spite of her own wishes, made him the idol of practical men and of aristocratic generals and administrators. Canning, on the other hand, as has been well said, was "Conservative in his opinions but Liberal in his sympathies"; he believed in public opinion and appealed to it eloquently in speech and writing; he was swayed by sentiment; he believed in the people and tried to win their confidence and affection; he disliked the haughty cold-bloodedness of aristocratic rule and detested alike the character and the policy of his rival.

Peel's sympathy went out toward Lord Castlereagh and not toward Canning. Though no aristocrat by birth Peel cultivated the coldness of demeanor which characterized the great aristocratic leader; he had a business-like appreciation of the practical man of affairs; he disliked sentiment and feared rhetoric; he loved his country deeply in the undemonstrative Castlereagh fashion and set to work to win for himself the reputation of a sober and practical administrator rather than of a brilliant orator. He preferred to be esteemed in the House of Commons as an effective debater and simple speaker, and it was by the deliberate avoidance of anything that sounded like eloquence that he gained the ear of the House of Commons. When Castlereagh returned to office in 1812 as secretary of state for foreign affairs under the prime ministership of Lord Liverpool, Robert Peel, though but twenty-four years of age, entered office as Irish secretary.

It is not intended in this essay to deal with the administrative career of Robert Peel. It is enough to state that in every office which he held he proved himself a faithful and hard-working public servant, skilled in the rapid dispatch of business and absolutely honorable in every detail of his public life. When he held the office of Irish secretary the actual executive power was still in the hands of the lord lieutenant of Ireland and Peel's position was not one of cabinet rank. His want of sympathy for the Irish people, his avowed opposition to Catholic emancipation, and his chilling manners made him profoundly unpopular, and he never received credit for his upright performance of his duties and his endeavor to heal the sufferings of Ireland by practical measures of relief. In 1818 he resigned an office which was distasteful to him, owing to its requiring long absences from England, and he remained out of office for some years, during which he devoted himself mainly to the discussion of financial questions. After the death of Castlereagh

in 1822 Lord Liverpool was obliged to reconstitute his cabinet, and he summoned to it George Canning to take the place of Castlereagh and Robert Peel to succeed Lord Sidmouth as home secretary.

The next five years fixed Peel's reputation as an administrator of the very first rank. In conjunction with Robinson at the Exchequer and Huskisson at the Board of Trade Peel carried out a series of financial and administrative reforms which form the real glory of the latter years of Lord Liverpool's administration, although they are not as generally appreciated as Canning's brilliant but somewhat sentimental foreign policy. They prepared the way, however, for the restoration of England's material prosperity, which had been terribly shaken during the dark years of panic which followed the conclusion of the war with Napoleon. When Lord Liverpool died in 1827 Peel was one of those unbending Tories of the Castlereagh type who refused to serve under Canning, and he received his reward when a few months after the death of Canning the Duke of Wellington formed an ultra-Tory administration in which Peel returned to the Home Office and became the leader of the House of Commons.

It was as a member of this ultra-Tory administration that Peel performed the first of the two famous reversals of policy upon which his reputation as a statesman largely rests. He had ever been a consistent opponent to granting the right of the franchise or other political rights to the Roman Catholics. But when he saw the kingdom threatened by revolution or at the very least by a serious political commotion if the rights of the Catholics were further denied he sank his personal convictions for what he believed to be the imperative need of the country and aided the Duke of Wellington, who had also sacrificed his personal prejudices, in forcing the Catholic Emancipation Bill and the repeal of the Test and Corporation Acts through an unwilling Parliament. For this conduct both Peel and the great duke were violently assailed by the fanatics of the Tory party as traitors and turn-coats, but neither of them swerved in doing their uncongenial duty, and religious disabilities for taking part in public life were abolished in England through the instrumentality of the two great Tory leaders, who placed the welfare of their country above their personal feeling.

It need hardly be said that Peel was an opponent of the Reform Bill of 1832. Although sprung from a different class from Castlereagh and Wellington he felt all their distrust of the extension of the franchise. The transference of power to the middle classes, which the Reform Bill accomplished, as a matter of fact conveyed political power to the very type of his fellow-citizens which was most strongly attracted by the practical common sense of Peel, and strengthened his political influence in his party and in the country. Nevertheless he continued in the Tory camp, and on the dismissal of the Reform ministry from office in 1834 he served for a few months as prime minister. He did this at the express desire of the Duke of Wellington, who declared that an English prime minister ought to sit in the House of Commons and therefore refused to repeat the political arrangement of the Tory cabinet of 1828. After this short tenure of the highest office Peel became the recognized leader of the Tory opposition in the House of Commons.

The years that immediately followed were of the greatest importance. They witnessed the accession of the young Princess Victoria to the throne of England, and it was speedily asserted that she had yielded her entire confidence, to an extent dangerous to the constitution, to the Liberal prime minister, Lord Melbourne. The relations of Queen Victoria to her first prime minister, who loved her as a daughter, saw her daily, and trained her for the part of a constitutional English monarch, have been admirably sketched by Mr. Reginald B. Brett in his "The Yoke of Empire." It was inevitable that the young and friendless girl, so suddenly called to the throne, should be impressed by the chivalrous devotion of Melbourne and should trust him with her whole heart.

It was under these circumstances that

Peel was placed in an exceedingly awkward position in 1839, when the Melbourne ministry was defeated in the House of Commons. Constitutional precedent demanded that Sir Robert Peel as leader of the opposition should be called upon to form an administration. This Peel declined to do unless he was permitted to replace not only the Whig ministers, but also the Whig ladies with whom Lord Melbourne had surrounded the young sovereign, with political partisans of his own. The queen passionately resisted the demand and the Melbourne ministry continued in office until 1841. By that time the temper of the country was unmistakably shown at a general election, and the queen was obliged to submit to all the demands of the Tory, or, as he was now called, the Conservative leader. But the queen was no longer so dependent upon Lord Melbourne as she had been two years before. Her marriage to Prince Albert had given her a prudent adviser and a friend upon whom she could rely. Yet it was with the greatest reluctance that she admitted Peel to office and she never became as intimate with him as she had been with his predecessor.

Sir Robert Peel's second premiership lasted from 1841 to 1846 and is one of the most important periods in modern English history. The great economic change which made England an industrial and commercial country was accomplished. The population had outgrown the home food supply and the industrial and commercial interests resented having to pay tribute to the agriculturists. Peel recognized the change that had come over the country. By wise financial measures, like the Bank Charter Act, he protected the commercial interests and eventually he made up his mind to carry through the House of Commons the repeal of the corn laws. This was the second great personal sacrifice of Peel's political career. As in the instance of Catholic emancipation, he ran counter to the strongest convictions of the party that he led and that had placed him in power; again, as in 1829, he was accused of inconsistency and the basest treachery; again he sacrificed his personal convictions and his very reputation to what he believed to be his country's good; and in doing this he set a high example of noble self-abnegation to English statesmen.

Never perhaps, except in the parallel case of Gladstone and home rule, has an English minister been so bitterly assailed as Peel was for bringing about the repeal of the corn laws. His old friends denounced him as a traitor; his old adversaries were skeptical as to the sincerity of his change of heart; there can be no doubt that Mr. Gladstone, who was one of the colleagues who stood by the premier, learned much from Peel's attitude of the lofty demeanor which he later exhibited. When Peel retired from office in 1846 it was found that in spite of the distrust of party politicians he had retained the confidence of all moderate Englishmen, and when he died from an accident in 1850 a spontaneous outburst of popular sympathy showed that the nation at large appreciated the statesman who had twice sacrificed personal reputation and party favor for his country's good.

Only the most striking characteristics of Peel's political career have been brought out in this brief sketch of his official life. It would be tedious to dwell on the details of his administrative achievements. It is enough to say that the practical business aptitude he had inherited from his father and sedulously cultivated had made him one of England's greatest administrators. But a word should be said of Peel's exceptional skill as a parliamentary leader. He was no orator, and this was in his favor, for the average Englishman of House of Commons' caliber has an incurable distrust for a brilliant talker. But he was an admirable debater; no man ever surpassed him in the power of making brief, business-like comments on matters under discussion or in the calm temper he brought into the legislative arena. Lord Beaconsfield, who did more than any other politician to hound Peel out of office, has borne testimony to Peel's greatness as a parliamentarian. After declaring that Peel was not a great minister, a great party leader, or a great orator, Lord Beaconsfield goes on to say in a famous

speech that: "What he really was and what posterity will acknowledge him to have been is the greatest member of Parliament that ever lived." Such praise from Peel's personal enemy may be taken as conclusive.

With regard to Peel's personality it must be acknowledged that he seems to have possessed none of the personal magnetism of the greatest of his contemporaries. His coldness of demeanor, in part due to shyness, concealed the real tenderness of his heart, and his sincere sympathy with all that was good and noble and progressive was carefully hidden away under the studied appearance of a mere practical business man. His ambition was for his country and not for himself, and it is well worth noting that when the queen pressed him to become a Knight of the Garter, the highest real honor she could offer to him, for a removal to the House of Lords would have meant political extinction, he refused in a very characteristic fashion. Mr. Brett says, in the volume already quoted:

He declared that his heart was not set on titles of honor or social distinctions; that he sprang from the people and was essentially of the people; that in his case such honor would be misapplied; that the only distinction that he coveted at her hands was that the queen should say to him: "You have been a faithful servant and have done your duty to your country and to myself."

No one had a better opportunity of studying Peel's character and conduct than Prince Albert, who, as the queen's permanent private secretary, was brought into daily contact with the minister. The Prince Consort summed up his opinion of Peel upon the great statesman's death in the following lines, which may well serve as the conclusion to this essay:

The constitution of Sir Robert Peel's mind was peculiarly that of a statesman, and of an English statesman; he was Liberal from feeling, but Conservative upon principle. While his impulses drove him to foster progress, his sagacious mind and great experience showed him how easily the whole machinery of state and of society is deranged; and how important, and how difficult also, it is to direct its further development in accordance with its fundamental principles, like organic growth in nature. It was peculiar to him that in great things, as in small, all the difficulties and objections occurred to him; first he would anxiously consider them, pause, and warn against rash resolutions; but having convinced himself, after a long and careful investigation, that a step was not only right to be taken, but of the practical mode also of safely taking it, it became a necessity and duty to him to take it; all his caution and apparent timidity changed into courage and power of action, and at the same time readiness cheerfully to make any personal sacrifice which its execution might demand.

THE HUMAN LIFE OF GOD.

CANON GORE, in his Bampton Lectures, adroitly uses the Jesuit theologian De Lugo as a man of straw through whom he may safely and vigorously attack the false conceptions of Christ's person which are still current, and to a considerable degree dominant, in dogmatic theology. He says that De Lugo depicts a Christ "who, if he was, as far as his body is concerned, in a condition of growth, was, as regards his soul and intellect, from the first moment and throughout his life in full enjoyment of the beatific vision. Externally a wayfarer, a *viator*, inwardly he was throughout a *comprehensor*, he had already attained. . . . It is denied that he can be strictly called 'the servant of God' even as man, in spite of the direct use of that expression in the Acts of the Apostles. He is spoken of at the institution of the Eucharist as offering sacrifice to his own Godhead."

Canon Gore condemns this picture by Lugo as in striking contradiction to that which the New Testament presents. But the point which I wish to make clear and distinct is that, in spite of this contradiction, the picture has not been frankly and finally discarded in Christian theology. It still exercises an obscuring and perverting influence upon the vision of Christ. It still produces, by imitation, representations of him in which definitions dominate facts and formulas hide or obliterate realities.

We do not need to go back to the seventeenth century, nor abroad to the Jesuits, for our examples. We may turn to Archdeacon Wilberforce's book on "The Incarnation," and find him representing the body of Christ as miraculous in its freedom from sickness, its power over animals, its exemption from the necessity of death, and its inherent power of communicating life to others. In regard to the mind of Christ, he says that "since it would be impious to suppose that our Lord had pretended an ignorance which he did not experience, we are led to the conclusion [astonishing conclusion!] that what he partook, as man, was not actual ignorance, but such deficiency in the means of arriving at truth as belongs to mankind." We may turn to the "Dogmatic Theology" of Dr. W. G. T. Shedd and read:

> Jesus Christ as a theanthropic person was constituted of a divine nature and a human nature. The divine nature had its own form of experience, like the mind in an ordinary human person; and the human nature had its own form of experience, like the body in a common man. The experiences of the divine nature were as diverse from those of the human nature as those of the human mind are from those of the human body. Yet there was but one person who was the subject-ego of both of these experiences. At the very time when Christ was conscious of weariness and thirst by the well of Samaria, he also was conscious that he was the eternal and only-begotten Son of God, the second person in the Trinity. This is proved by his words to the Samaritan woman: "Whosoever drinketh of the water that I shall give him shall never thirst; but the water that I shall give him shall be in him a well of water springing up into everlasting life. I that speak unto thee am the Messiah." The first-mentioned consciousness of fatigue and thirst came through the human nature in his person; the second-mentioned consciousness of omnipotence and supremacy came through the divine nature in his person. If he had not had a human nature, he could not have had the former consciousness; and if he had not had a divine nature, he could not have had the latter. Because he had both natures in one person, he could have both.

We may turn to Canon Liddon's magnificent work on "The Divinity of Our Lord" and find him writing:

> Christ's manhood is not of itself an individual being; it is not a seat and center of personality; it has no conceivable existence apart from the act whereby the Eternal Word in becoming incarnate called it into being and made it his own. It is a vesture which he has folded around his person; it is an instrument through which he places himself in contact with men and whereby he acts upon humanity.

And so, if we accept this picture of Christ, the manhood of Jesus fades, retreats, grows dim and shadowy. It wavers like a veil. It dissolves like mist. It descends again, mysterious and impenetrable, illusory and impersonal, to envelop him whom we love and adore in its strange and unfamiliar folds. We grope after him, but we can touch nothing but the hem of his mystic robe. We long for him, but he approaches us, and comes into contact with us, only through an instrument. He is not what he seems. The Son of God behind that veil is beyond our reach. The Son of Man, whom human eyes beheld and human hands touched, is not the real, living, veritable Savior, but only the form, the garment, of an inscrutable life. And if, in our dire confusion, our reasoning faith still succeeds in holding fast to the Eternal Logos, our confiding faith is maimed and robbed by the loss of that true, near, personal, loving, sympathizing Jesus, who was born of a woman, suffered under Pontius Pilate, was crucified, dead, and buried. He is gone from us, as certainly as if the Pharisees had spoken truth when they said that his disciples came by night and stole him away. The thing of which we are most in doubt, and about which we are least capable of any positive affirmation, as Dr. Bushnell said, is the humanity of Christ. We are left with a perfectly orthodox doctrine of two natures, but we no longer have a clear and simple gospel of One Person to teach to doubting men.

But the heart of Christendom has never rested content with this distant, vague, uncertain view of the real manhood of our Lord. There has always been a protest against it. There has always been an effort to escape from it.

We can see a strange and indirect but indubitable evidence of this deep inward dissatisfaction in the rise and growth of an

impassioned devotion to the human mother of Jesus. The worship of the Virgin Mary was a reprisal for the obscuration of the humanity of her Son. In the thought of her true womanly tenderness and affection, her real and unquestionable sorrows, her simple and familiar joys, her intimate, genuine, unfailing sympathy with all that makes our mortal life a bitter, blessed reality to us, the souls of the lowly and the lonely found that peace and consolation which they could no longer find in the contemplation of the distant Second Person of the Trinity through the telescope of theology. That which Jesus himself was to John and Peter, to the household of Bethany, to the penitent publican, and to the woman which was a sinner, Mary became to the baffled and confused faith of a later age—an approachable mediator of the divine mercy, a helper who could really understand and feel the need of those who cried for help, a warm and living image of the Eternal Sympathy in flesh and blood. In the light of medieval dogmatics Mariolatry appears not without its justification. And for my part, I should not wish to be bound to the Christology of Peter Lombard and Thomas Aquinas, without finding the compensation which their followers found in personal devotion and confidential trust, flowing instinctively and irresistibly toward the blessed Virgin.

But, after all, this was only a substitute for the real thing. It gave to faith the image of a lovely and adorable humanity in closest union with God; but it did not give back the old vision of the human life of God. And so through all the ages we see men turning, now in solitary thought, now in great companies, to seek that vision. The renaissance of Christian art, with its beautiful pictures of the infancy of Jesus, with its piercing and pathetic representations of the sufferings of Jesus, bears witness to the eagerness of that search. The revivals of Christian life, seen in such diverse yet cognate forms as the rise of the "Poor Men of Lyons" and the foundation of the "Brotherhood of St. Francis" are evidences of the same movement back to Christ. Peter Waldo outside of the church, and Francis of Assisi within the church, were awakened by the same vision of Jesus, "a man of sorrows and acquainted with grief," and were inspired by the same desire to make his real human life the pattern of all piety and the example of all goodness.

The Reformation, which was at once and equally an intellectual and a spiritual protest against the arrogance of current theology and the coldness of religious life, supplies no better watchword to express its great motive than the saying of Erasmus: "I could wish that those frigid subtleties either were completely cut off, or were not the only things that the theologians held as certain, and that *the Christ pure and simple might be implanted deep within the minds of men.*" Modern biblical scholarship, with its splendid apparatus of linguistic and historical learning, proceeding in part, at first, from a skeptical impulse, has developed in our generation, either through the conversion of skeptics in the process of research, or through the awakening of believers to the necessities of their faith, into a reverent and eager quest for the historic Christ, the Jesus of the Gospels, the Lord of the primitive church, that we may see him as the first Christians saw him, in the integrity of his person and the sincerity of his life, and receive from him what they received—a faith that dissolved doubts and an inspiration that conquered difficulties. Back to the New Testament of our Lord and Savior Jesus Christ—back to the facts that lie behind the definitions, back to the Person who embodies the truth, back to the record and reflection of that which the apostles "heard, and saw with their eyes, and looked upon, and their hands handled of the word of life"—this, and this only, is the way that leads us within sight of

> the heaven-drawn picture
> Of Christ, the living Word.

Now it is a marvelous thing, and one for which we can never be grateful enough, that when we come to the New Testament in this spirit, we find in it exactly what we need; not an abstract formula, not a collection of definitions, but the graphic reflec-

tion of a Person seen from a fourfold point of view, and the simple record of manifold human experience under the direct and dominant influence of that Person. And the one fact that emerges clear and triumphant from the reflection and the record is that the writers of the New Testament never were in doubt of the human nature of Christ and never hesitated to make the most positive affirmations in regard to it.

The Christ of the Gospels is bone of our bone, flesh of our flesh, mind of our mind, heart of our heart. He is in subjection to his parents as a child. He grows to manhood. His character is unfolded and perfected by discipline. He labors for daily bread, and prays for divine grace. He hungers, and thirsts, and sleeps, and rejoices, and weeps. He is anointed with the Spirit for his ministry. He is tempted. He is lonely and disappointed. He asks for information. He confesses ignorance. He interprets the facts of nature and life with a prophetic insight. But he makes no new disclosures of the secrets of omniscience. There is no hint nor indication that he is leading a double life, reigning consciously as God while he is suffering apparently as man. His personality is simple and indivisible. The glory of what he is and does lies not only in its perfection, but in the hard conditions of its accomplishment. Superhuman in his origin, as the only begotten Son of God; superhuman in his office and work, as the revealer of the Father and the redeemer of mankind; in his earthly existence the Christ of the Gospels enters without reserve and without deception into all the conditions and limitations which are necessary to give to the world, once and forever, the human life of God.

When we turn to the epistles to see how this view of Christ was affected by the recognition of his divine glory and power as one who had been raised to the right hand of God and made head over all things to the church, two things strike us with tremendous force. First, the identity of his person was not lost, nor the continuity of his being broken: the exalted Christ is none other than "this same Jesus." Second, the reality and absoluteness of his humiliation are emphasized as the ground and cause of his exaltation.

How vividly these two things come out, for example, in the writings of St. Paul. It has been well said that "the Christ whom Paul had seen was the risen Christ, and the conception of him in his glorified character is the one which rules his thoughts and forms the starting-point of his teaching." Corresponding to this present glory, Paul assumes an eternally preexistent glory of Christ as the image of the invisible God, the medium and end of creation. Now it is of this Person, divinely glorious in the past as the One who is before all things and in whom all things consist, divinely glorious in the present as the One who is far above every name that is named, not only in this world but in that which is to come—it is of this Person that Paul writes, in words so strong that they touch the very border of the impossible: "For our sakes *he beggared himself* that we through his beggary might be enriched." And again: "He, existing in the form of God, did not consider an equal state with God a thing to be selfishly grasped and held, but *emptied himself*, and took the form of a slave, being made in the likeness of man." These powerful expressions, "self-beggary," "self-emptying," seem to be directly designed to break up the conventional molds in which dogmatic theology has attempted to cast the truth and let it harden. They bring back a vital warmth and motion into the facts of the Incarnation. Once more it glows and flows. Once more we see that it is not a mere exhibition of being but a process of becoming.

The idea of self-beggary overflows the statement that a human nature was added and united to the divine nature; for that would have been no impoverishment but an enrichment. The idea of self-emptying shatters the narrow dogma that the Son of God suffered no change in himself when he became man. It was a change so absolute, so immense, that it can only be compared with the vicissitude from fulness to emptiness. He laid aside the existence-form of God, in order that he might take the exist-

ence-form of man. Whatever right he had to an equal state of glory with God, that right he did not cling to, but surrendered, in order that he might become a servant. And upon this real self-emptying there followed a real self-humiliation, wherein, being found in fashion as a man, he became obedient unto death, even the death of the cross. It was on account of this—and by "this" we must understand the entire actual operation of the self-denying, self-humbling, self-sacrificing mind of Christ—it was for this reason, St. Paul declares, that "God highly exalted him, and gave unto him the name which is above every name." And I know not how to interpret such language with any reality of intelligence, unless it means that the present glory of the Son of God is in some true sense the result of his having become man and so fulfilled the will of God.

This view, which St. Paul condenses into a single pregnant "wherefore," is expanded in the Epistle to the Hebrews. The object of this epistle is to show the superiority of the priesthood and sacrifice of Christ, which are substantial and enduring, to the priesthood and the sacrifice of the old dispensation, which were shadowy and transient. But the method which the writer follows is not to deny, but to assert the verity of Christ's humanity. Without this he could not be the true priest nor offer the true sacrifice. "In all things it behooved him to be made like unto his brethren." "For we have not an high priest which cannot be touched with the feeling of our infirmities: but was in all points tempted like as we are, yet without sin." "Though he were a Son, yet learned he obedience by the things which he suffered, and being made perfect, he became the author of eternal salvation unto all them that obey him." This complete incarnation, this thorough trial under human conditions, this perfect discipline of obedience through suffering, was a humiliation. But it was in no sense a degradation. On the contrary, it was a crowning of Christ with glory and honor in order that he might taste death for every man. "For it became him, for whom are all things and by whom are all things, in bringing many sons to glory, to make the captain of their salvation perfect through suffering." If the Epistle to the Hebrews teaches anything, it certainly teaches this. The humanity of Jesus was not the veiling but the unveiling of the divine glory. The limitations, temptations, and sufferings of manhood were the conditions under which alone Christ could accomplish the greatest work of the Deity—the redemption of a sinful race. The seat of the divine revelation and the center of the divine atonement was and is the human life of God.—*Henry Van Dyke, D.D., LL.D., in "The Gospel for an Age of Doubt."*

THE CENTRAL ELEMENT OF ORGANIZED MATTER.

BY L. H. BATCHELDER, A.M.

PROFESSOR OF PHYSICAL SCIENCE IN HAMLINE UNIVERSITY.

I.

A NEWLY discovered element always excites great interest among students of chemistry. This is true, though the discovery may have no practical, that is, economic value whatever, for many questions of interest arise concerning its properties and chemical conduct. One important question concerning such a new-found citizen is its place in the periodic table of elements, as was shown in the article of last month. The recently discovered elements in the atmosphere well illustrate this.

Yet one element among the best and earliest known, and around which by far the greater part of the chemist's investigations for a century have centered, still retains the chief place in his interest. It is to a study of this element and its compounds that the science of chemistry is largely, if not mainly, indebted for its present development. It is by its study that the chemist hopes

to penetrate still deeper into the secrets of the molecular and atomic world; that he hopes, perhaps, yet to discover the secret of all secrets. The element carbon, in its uncombined form, is familiar as charcoal and anthracite, somewhat less so as plumbago, and still less familiar, at least to most, as the diamond—very different forms of the same substance, but that each is really carbon is proved by the fact that, on being burned in pure oxygen, they all alike produce carbon dioxide. This property, by virtue of which an element can exist in such dissimilar forms, is not peculiar to carbon. Oxygen has the same property, its two forms being the normal oxygen and an unstable modification known as ozone. The same property is also exhibited by phosphorus, of which there are four known varieties, and by sulphur, of which there are several varieties. The difference in the two forms of oxygen is found to depend upon the fact that the molecule of normal oxygen contains two atoms, while that of ozone contains three. No satisfactory explanation has been given of the difference between the varieties of phosphorus, sulphur, and carbon. It will probably be shown to be due to the way in which the atoms are grouped in the molecule, and perhaps also to the grouping of the molecules to form masses.

The principal form in which carbon occurs in nature is in chemical union with other elements; thus it occurs, not only in living things, but in their fossil remains, as in coal. Petroleum, the formation of which is believed by most chemists to be due to the decomposition of submarine life through geologic time, is composed of a large number of compounds, the most of which contain only carbon and hydrogen. Most products of plant life contain the element carbon with hydrogen and oxygen, among the most common and useful of which are such substances as sugar and cellulose. The products of animal life contain carbon combined with oxygen, hydrogen, and nitrogen, among which are such substances as albumen, casein, and fibrin. Carbon occurs too in the well-known carbon dioxide of the atmosphere, of which it forms about 1-2500oth part. It occurs also as salts of carbonic acid or carbonates. These carbonates—limestones, dolomites, chalks—form whole mountain ranges, and thus carbon is an important constituent of the very rock crust of the earth. Carbon is the central element of organized matter. "There is not a living thing, from the minutest microscopic life to the hugest mammal, from the tiniest cryptogam to the huge California redwood, which does not contain carbon as an essential constituent."

The number of compounds which it forms is almost infinite, though these compounds are produced by a union of carbon with a very few elements, viz.: hydrogen, oxygen, nitrogen, sulphur, and phosphorus. These compounds are commonly treated together under the head, "organic chemistry." It is now known that there is no good reason for this except convenience, partly the outgrowth of custom. It was formerly believed that organic compounds, since they are elaborated under the influence of life processes, must have something about them which distinguishes them from inorganic compounds, in whose formation the life processes take no part. While this belief, which amounted almost to fetichism, prevailed, there could, of course, be no successful study of the carbon compounds found in organized bodies. But in 1828 Wöhler, an eminent German chemist, then a teacher at Berlin, succeeded in preparing urea artificially. Up to this time urea, like other organic compounds, was thought to be intimately and necessarily connected with life. But it was thus shown that it could be formed without the intervention of life. Indeed, it was ultimately built up in the laboratory from its elements. Gradually, since that time, the artificial preparation, by purely chemical means, of other compounds of carbon found in the organs of plants and animals, has been accomplished, until, as has been said, the term "organic chemistry" has no longer any real significance. It has thus gradually become evident that the formation of the compounds of carbon is not dependent upon life processes, but

that they are simply chemical compounds, governed by the same laws that govern other chemical compounds. With the acceptance of this truth, chemistry took a great step forward, or rather was in a position to do so, for much of the progress, in theoretical chemistry especially, has been gained by the study of the nature and conduct of these compounds of carbon.

At ordinary temperatures carbon is a very inactive element. Thus if left in contact with almost any one of the elements, no chemical union takes place. It will not combine with any element unless the temperature is raised to what is known as its combining temperature—a characteristic not peculiar to carbon, as many of the elements have their peculiar combining temperatures, an illustration of the fact that heat, or rather temperature, is an important factor in chemical reaction. Temperature, indeed, is not only a determining factor of chemical affinity, but of valency as well; that is, it often determines not only whether any union between elements shall take place, but also the proportion in which such combinations shall occur. This illustrates again the intimate relation which exists between the so-called physical and chemical properties of matter.

The elements chlorine, oxygen, nitrogen, and hydrogen being gaseous, and the compounds of the first three with hydrogen being also gaseous, it is comparatively easy to study their volumetric relations. This, as we have seen, was done by Dalton and his successors in founding our modern science of chemistry. But carbon has never been obtained in the form of a gas. It has never even been melted, though in the high temperatures of the electric arc some forms of it have been softened; hence it is impossible to determine the ratio between carbon gas and that of other gases, or to determine directly its atomic weight by the method based on the law of Avogadro.

Direct union of hydrogen and carbon can be obtained by means of the electric current. If an electric arc light be surrounded by an atmosphere of hydrogen, the carbon of the pencil and the hydrogen combine to form acetylene gas, the molecule of which has been shown to be composed of two atoms of carbon united with two atoms of hydrogen. This gas may be produced in still other ways. In 1894 Moissan, the celebrated French chemist, discovered a method for preparing it which has since been exploited in this country for the production of acetylene as an illuminant, as the gas has a very high illuminating power.

When any organic matter, which it will be remembered always contains carbon, is decomposed without free access of oxygen, the final product is a gas known as methane, or, more commonly, marsh gas, the molecule of which is represented by the formula $C H_4$, that is, its molecule contains one atom of carbon and four of hydrogen.

Petroleum is composed of a mixture of hydro-carbons. So again when wood or soft coal is heated without access of oxygen, the hydro-carbons of ordinary illuminating gas are given out. The number of hydro-carbons is now very great and others are constantly being made or discovered. As has been seen, carbon is distinguished for the number of its compounds; the simplest of these are the hydro-carbons. There are certainly more than four hundred of these already known, most of which have, however, comparatively simple relations to one another, so that, though their number is great, their study is not so difficult as one might imagine.

When petroleum escapes from the earth it is mixed with a number of gases; the simplest of these is found to be composed of one atom of carbon and four of hydrogen, the marsh gas mentioned above; the next simplest of two atoms of carbon and six of hydrogen; the next three atoms of carbon and eight of hydrogen, and so on. So that, so far as composition is concerned, these substances bear to each other a simple relation, each differing from the next below it by an atom of carbon and two of hydrogen to the molecule. They thus form a series known in organic chemistry as the marsh gas series. This relation is known as homology, and such a series is known as a homologous series. Now carbon is distinguished from

all other elements by its power to form homologous series, and herein lies one of the reasons for its importance and for its great and never-ceasing interest to the chemist. The explanation of this homology between the compounds of carbon is of the utmost value in the science and is based on the view, first, that carbon is quadrivalent—in other words, a carbon atom has the power to hold in chemical combination four atoms of hydrogen; and, second, that carbon has the power to unite with itself in chains. Indeed, so far does this last power exhibit itself that compounds of carbon and hydrogen have been made in the laboratory, which contain as many as sixty atoms of carbon to the molecule.

Besides this series, known as the marsh gas series, the simplest member of which is marsh gas, there are other homologous series; one, for example, begins with a gas containing two atoms of carbon and four of hydrogen; each succeeding term, as in the marsh gas series, differs from the one below it by one atom of carbon and two of hydrogen to the molecule. Another series begins with acetylene gas, already mentioned, and still another, known as the benzene series, begins with benzene, with six atoms of carbon and six of hydrogen to the molecule, each member in these series differing from the one below it, as in the former cases. The relations between the different members of these series, and between the series themselves, have now been extensively studied.

Mainly through these and similar studies a foundation of fact has been gradually acquired, on which have been built up many of the most important laws and theories of chemistry. The amount of painstaking and skilled research which has been given to these compounds—research to which many able men have devoted themselves for a lifetime—illustrates the methods of modern chemistry, and, indeed, of all modern science. Modern science questions nature minutely and skilfully for her facts, and from the facts so discovered seeks to deduce the laws of her action. Until Lavoisier, chemists too often sought for facts that they might substantiate some favorite theory. Thus for a long time chemists sought to support the phlogiston theory, which Lavoisier's work was so largely instrumental in finally destroying. The influence of this modern method, introduced by physical science, in shaping all our other thinking has been most important. Of this perhaps something more hereafter.

Only one or two of the simpler facts derived from the study of these compounds of carbon can be noticed in this article. Let us try to picture the relation between the members of the marsh gas series—a relation which is at once highly interesting, simple, and important. To begin with, the marsh gas molecule is a single carbon atom surrounded by four hydrogen atoms. It has been found that carbon cannot be made to combine with a larger proportion of hydrogen; nor does the carbon atom form a complete molecule with a less proportion of hydrogen than this. Again, it has been shown beyond a doubt that there is no difference between the relations which the hydrogen atoms in the molecule of methane bear to the carbon atom, or to each other. What the relative position of the hydrogen and the carbon atoms in methane is, that is, whether the molecule has a definite structure, like that, for example, of the framework of a house or other building, and, if so, whether this structure may be known, are questions which have been studied with great ingenuity and patience, as yet with no very conclusive results, though recent investigation seems to show that the carbon atoms react as if their attraction for the hydrogen atoms were exerted along four lines connecting the center of a sphere with four points symmetrically grouped upon its surface, these four points corresponding to the angles of a regular tetrahedron.

Imagine now a number of such groups or molecules, from each one of which one of the hydrogen atoms has been removed; the resulting groups are unsaturated molecules. This term "unsaturated" is used in contrast with "saturated." The latter expression is understood to signify that the compound has no power to unite

directly with other compounds or elements, as is the case with marsh gas itself. By the former term is meant, on the other hand, a compound which can take up elements or other compounds directly. This, then, is the case with our molecules of marsh gas, from each of which we have imagined a hydrogen atom split off. If these unsaturated molecules are brought into proper relations, they will react on each other, uniting two and two, carbon atom to carbon atom, by means of the affinity which was at first satisfied by the hydrogen atom, which we have imagined to be removed. What will be the composition of the molecules so formed? They must consist of two atoms of carbon and six of hydrogen, expressed by the symbol $C_2 H_6$. But this is the second member of our marsh gas series. Thus we have the relation between the first and second members of the series, and, in an identical way, the relation may be traced between subsequent members of this series and between the different members of all the homologous series. Nor is this any mere fancy sketch. This has in many cases actually been done, so that the many hydro-carbons now fall naturally into their places like good soldiers, and, instead of a mob of compounds, we have a thoroughly organized hydro-carbon army with which to march forward to other victorious investigations.

FACTORY LIFE AND LEGISLATION IN ENGLAND.

BY A. M. ANDERSON.

TO write, even briefly, of factory life in England without either assuming some study by the readers of the laws which form its framework or, in default of that, to give some clues to the extent and operation of those laws would be as fruitless a task as to write a history of the English people without tracing the growth of self-government and parliamentary institutions, or a history of the influence of Rome on Europe without telling of her jurisprudence.

The future of the factory system in England now cannot be thought of as otherwise than guided and controlled by the great body of legislation which has been probably more surely and gradually built up upon experience and experiment than any other group of laws; whether the laws compared are groups of English laws or the English factory laws as against similar more recent industrial codes in other manufacturing countries. It is such a reflection that yields perhaps the most fruitful and instructive point of approach for the subject of this paper, although the aim in view is certainly far rather to be instructive as to the present than prophetic of the future.

In the view of the writer, moreover, it is impossible to be either helpful or interesting in writing of the existing English factory system without a passing attempt to point the reader back to a study of its antecedents in a momentous struggle of the first half of this century. I refer to the struggle between the supporters, on the one hand, of an "individualism" which threatened not merely the liberty of the working population but the future of the nation in the lives of its children, through the working of the uncontrolled forces set loose by the "industrial revolution," and the advocates, on the other hand, of a social control of these forces.

A very brief examination of the appalling records of disease and suffering, immorality and misery, too often cruelty and death, disclosed both in such contemporary literature as Alfred's "History of the Factory Movement" and in the weighty reports of the early parliamentary committees, will illustrate my point fully for those who desire to satisfy themselves as to the facts on which it is not intended here to further dwell. Little as those engaged in the actual struggle to obtain legislation seem to have realized it at the time, overshadowed as their minds were by the gigantic abuses that had to be met and overcome, the actual

function of the legislator was far less to impose an external rule, binding on both employers and employed in the factory, than to draw out an order from within the system itself; an order in which the will of both masters and workers ought to find expression. It is most striking in the history of the movement how often the wish of a few of the best manufacturers has anticipated the desires of the workers, and even now in watching the operation of the latest additions to the factory "code" the observer may note that this evolution is still going on and that the legislator appeals as frequently to the experience of the best employers as to the general needs of the workers to guide him into the possible paths of progress and reform.

The term "factory," which has a different meaning in different European countries, has not always had the same meaning in England throughout this century. It would take too long to trace out the successive meanings in our statute book, and here it must suffice simply to suggest its present meaning. In our factory laws a *workshop* is distinguished from a *factory*, and although as to limitations and inspection they are under nearly the same rules, it is in the latter that all the strictest requirements as to hours of children, young persons, and women, and general sanitation and safety most fully apply. The reason for this is mainly historical, springing from the earlier great need in the larger work places where mechanical power was applied to machinery, but recent legislation, both in England and in some of the colonies, *e. g.*, New Zealand, seems to foreshadow a time when, as far as possible, the limitations will be similar in all. The general distinction between a factory and workshop is that in the first, in the majority of cases, machinery driven by mechanical power is used in the making of articles for sale (by means of manual labor exercised for gain) and that, in the latter, mechanical power is absent. There are, however, a number of so-called "factories," such as lucifer-match works, tobacco works, earthenware works, fustian-cutting works, some of them specially unhealthy, in which power is not used, and in which the strictest requirements of the factory acts as to hours, meal-times, holidays, ventilation, sanitation, etc., nevertheless apply. The annual report of Her Majesty's chief inspector of factories, issued last month, shows that during 1897 there were under inspection (by a total staff of 107 inspectors) no fewer than 200,000 factories and workshops, employing at least 4,500,000 persons, and the following table will illustrate the recent growth of manufacturing industry:

	Workshops.	Workshop employees.	Factories.	Factory employees.
1895.....	71,424	547,615	62,584	3,555,860
1896.....	81,669	655,565	79,279	3,743,418
1897.....	122,274	*——	85,627	*——

From the point of view of administration these figures indicate very readily that enormously larger though the industrial population employed in factories, as distinguished from workshops, may be, the task of inspecting and enforcing the law in the latter forms a very large proportion of the whole. To obtain any conception of the proportion of manual workers employed in manufacturing industry, complete returns, not yet accessible, would have to be examined of outworkers employed by manufacturers in the work which they take to their own homes. To this immense class are applied certain regulations, of which may especially be mentioned those contained in the truck acts. These are administered by the factory inspectors, and, briefly, provide that wages shall be paid in full in current coin of the realm without fines or deductions, unless the worker has agreed in a contract to these fines or deductions as reasonable—a much-valued and much-needed safeguard of the fundamental interests of a specially dependent class of workers.

Returning to factory workers, the first question that suggests itself is: What proportion of the 3,743,418 employed in 1896 were under the fullest protection afforded by law, and what are the chief features of that protection? Women, young persons (under eighteen years), and children are the persons who share in the benefits both of limitation of hours and of the provisions

* Returns not yet issued.

for sanitation and safety. These persons, described as "protected persons," number 1,648,231, of whom more than half are under eighteen years of age, and of the latter, 62,613 are under fourteen and work on the "half-time system" from the age of eleven years upward; the remainder, adult males, work only under the protection afforded by the provisions for sanitation and security against accident, except in certain peculiarly unhealthy industries, where, since the Factory Act of 1895 came into force, the secretary of state has power by order to limit their hours, as well as those of women and children. Thus, in principle, limitation of hours to a reasonable or healthful maximum is in effect conceded for all workers.

The question of special regulation for unhealthy or dangerous industries has come with great persistence before the public of late years, and changes and advances, particularly in provisions for safeguarding the life and health of women and young persons, are in steady progress. In a few processes the employment of one or both of these classes of persons has been entirely forbidden; for instance, neither women nor persons under eighteen may work in the white beds of white lead factories; and in certain vulcanizing rooms in india-rubber works, where carbon bisulphide is used, young persons and children are excluded, while men and women may not work for longer than two and a half hours at a stretch, nor for more than five hours in one day. These prohibitions follow on many detailed and minute rules for minimizing various dangers (by mechanical ventilation, means of personal cleanliness, prohibition of meals in workrooms, etc.). They are among the most recent and important steps of the last few years, and the reports of departmental committees and the scheduling, step by step, of further industries by secretary of state's orders point in the direction of ever-growing and more scientific care over the lives of workers of all ages and both sexes. So great are the developments of the principle of protection of human life and limb in manufacturing industry, first fought and first won in England, and now being scientifically applied not only in England but in some cases more rapidly in other European countries.

In the task of bringing to light the special sufferings and needs of women and girls, in factories generally and in unhealthy processes particularly, much reliance has been in recent years placed in England upon the services and inquiries of specially qualified and officially appointed women. The largest movement in this direction was in 1892, when four ladies were appointed as assistant commissioners to the Royal Commission on Labor. The result of their inquiries all over Great Britain and Ireland was embodied in a report and was specially exhaustive in certain representative centers of industry (such as the chief manufacturing towns in Lancashire and Yorkshire, and in Nottingham for the various branches of the textile industry, Staffordshire for the potteries, Newcastle, Sheffield, etc., for white lead works, Leeds, Manchester, etc., for wholesale clothing, and so on). These ladies were concerned with inquiry into rates of wages of women as compared with men, as well as the effects of women's industrial employment on their health, morality, and the home; but the most impressive results of their inquiry bore upon questions of sanitation and health and have left great and permanent traces on factory administration, as well as legislation. One of their number was, at the close of the inquiry, appointed permanently as a special labor correspondent for women's industrial conditions to the statistical department of the Board of Trade, and another, Miss Abraham, was appointed the first, with one other lady, of Her Majesty's women inspectors of factories under the Home Office. The reports of these inspectors and others afterward added to the staff (now numbering five), have appeared annually since 1893, and form a most important guide to the modern social aspects of the employment of women and children in factories, and to the grave questions of improved hygiene and fuller protection of young life.

What are in outline the general conditions, not touching upon the special manufactur-

ing process, which should be found in any factory, and which are enforced by the general staff of Her Majesty's inspectors?

In every factory and workshop there should be found affixed an abstract of the law which has been prescribed by the secretary of state and especially made clear enough for both workers and employers to study and comprehend; and affixed with it should be notices relating to hours, mealtimes, weekly half-holidays, and annual holidays.

In every factory and workshop there must be sufficient cubic space (at least 250 cubic feet for each person, and, in some circumstances, more) and ventilation; and the ventilation must be by mechanical means if dust or fumes arise in the manufacture. Work-places must be kept in a cleanly condition, and in every case there must be suitable, sufficient, sanitary provision, separate for the sexes.

It should be observed that these general health provisions are, in workshops, as distinct from factories, primarily supervised by the officers of the local sanitary authority, not by the factory inspectors of the Home Office. This was a devolution of some of the immense work of the latter department which was effected by the Factory Act of 1891, but it is still in the power of the factory inspectors to take note of the work done, and, if necessary, to act in default of the local authority. The provision for maintaining a reasonable temperature in workrooms, which was added in the Factory Act of 1895, is entirely under the control of the government inspectors, as are the other provisions in factories for health and safety. The influence of the women factory inspectors in these sections of their work may be best indicated by a quotation from their report in 1895. Miss Deane in that year made a special inquiry concerning sanitation in the Midland and Black country districts.

Contrary to my expectations, I found that the sanitary condition in factories where women were employed compared in no way favorably with that obtaining in workshops, although the larger number employed in factories makes the matter of even more importance. I have been glad to find that in some cases the unsatisfactory conditions have been remedied by employers when once their attention has been called to the subject, and the satisfaction with which such changes have been received by the women becomes almost pathetic when it is recollected that a healthy and decent condition is not, after all, such an overwhelmingly beneficent privilege. I regret that in too many cases the long-continued negligence in this matter has produced the inevitable consequence of a low standard of tone and behavior, the blame for which should in justice be thrown upon the carelessness which has permitted such conditions, rather than (as is too frequently the case) upon the unfortunate victims of such a state of affairs. The eagerness with which the women have received me, as a woman, and the fact that by far the larger number of complaints I have received relate to insanitary conditions in factories, seems to emphasize the need which exists for such an inquiry.

In the Irish northern linen districts the women inspectors also found that

the difficulties on this point have been much enhanced in certain instances where the erection of large factories and rapid influx of population has turned small villages almost suddenly into manufacturing towns, while no measures have been taken to meet the increased requirement by a corresponding advance in the method of sanitation, the primitive and chaotic condition of which has produced very unsatisfactory and deplorable results. Apart, however, from the general view of the requirements of a whole neighborhood, we found a general lack of adequate or suitable arrangements in the mills and factories—such accommodation as existed often grievously wanting in the first elements of decency, and generally opening directly into the hot, steaming spinning or weaving sheds, an arrangement which results, where the sheds are mechanically ventilated, in an indraught of foul air, a consequence almost certain to follow when the sanitary arrangements open directly into the workrooms.

In the report for 1896 it appears that quite a large proportion of complaints relate to temperature.

Few provisions of the last act have been received with more openly expressed gratitude by the workers, many of whom suffered severely from the lack of such a regulation. There are, however, instances in which difficulties arise; it is a very common practice to obtain the required warmth by means of constantly flaring gas-lights, an unwholesome method of heating which inevitably results in vitiated atmosphere. This provision, moreover, is of no advantage to the number of little children and growing girls and boys employed in some of our largest industries; there are many places where the temperature, having regard to the necessities of the work which is carried on, cannot, it is said,

be called unreasonably high, which nevertheless appear eminently unfitted, in this respect, for the children and young persons who work in them. Any one who had noted the scantily-clad little figures, their faces often beaded with perspiration, who pass to and fro in the cotton-spinning, weaving, and winding rooms or in flax-spinning and weaving rooms in a temperature of 80 to 86 degrees, must feel convinced that to work constantly in this high temperature cannot but be injurious to the undeveloped little frames and constitutions. Where they are employed on errands between one room and another, the case is worse, for the frequent transition in winter from the super-heated rooms to the freezing air outside them is a continued danger. It would be well if children and young persons could be debarred from working in a temperature above a certain height, for apart from the direct risks to creatures too young to take proper precautions against the sudden change of atmosphere when leaving at night, the relaxing effect of living practically all day in such a temperature must tell harmfully on unformed constitutions.

If one were trying to give illustrations, by means of striking contrasts, of the change from the old industrial world before power-driven machinery was the basis of manufacture to the present, one would probably turn first to the record of accidents in factories and workshops. Failing any records of industrial accidents last century, when factories in the modern sense did not exist, the comparison of the two classes of work-places now is sufficiently instructive. Out of 658 fatal accidents and 39,816 non-fatal accidents, only 3 fatal and 77 non-fatal occurred in workshops! If to this record is added the 1,239 cases of poisoning of various kinds (lead, phosphorus, arsenic, anthrax) in unhealthy industries, it will be seen how gigantic is the problem still before factory reformers who aim at the fuller safeguarding of life, health, and limb in manufacture. What proportion of these most striking figures affect the classes of workers hitherto specially distinguished as "protected persons"—namely women and persons under eighteen? Of children under fourteen years 224 were victims of accidents, 4 being fatal; of persons under eighteen years, 5,176 were victims of accidents, 73 being fatal; of women over eighteen years, 1,668 were victims of accidents, of which 9 were fatal.

From these statistics it is clear that the great majority of accidents affect the "unprotected" persons, namely adult male workers; but to a great extent this is the result of the fact that the more dangerous occupations are filled by men, and is not due to greater care in safeguarding machinery at which women work, all machinery alike, whether worked by men or women, being under the fencing clauses of the acts; in the textile industry, where women are so largely employed, far more than half of all the accidents affecting women occur. If we turn to the reported cases of poisoning, it is to be observed that there is no such striking disproportion between men and women, although in many of the unhealthy industries men are employed in larger numbers than women. Out of the 1,239 cases of poisoning, 506 affected women or girls, and 504 of these were cases of lead-poisoning (the majority arising in china and earthenware and white lead works). It is the opinion of experts that female workers are peculiarly susceptible by constitution to the influences of this poison, and this opinion would appear to account for the recorded proportion.

Turning now to the consideration of limitation of hours in factories, the most important step that has been taken in recent years is in the general prohibition of overtime for young persons. The hours in all factories and workshops except laundries must be fixed within the outside limits of a round of the clock, *e. g.*, 6 a. m. to 6 p. m., 7 a. m. to 7 p. m., 8 a. m. to 8 p. m. In certain industries, but not in any textile industries, overtime is allowed to women for an extra hour and a half on not more than thirty nights in a year, but this must be notified, before it begins, to both workers and the inspector for the district. Meal-times must be fixed, and cannot be changed without notice to the inspector. In textile factories there must be two hours' rest for meals, and in other factories and in workshops one and a half hours' rest in the twelve. Work may not be taken home from the factory at the end of the day by any child, nor by any woman or young per-

son who has worked before as well as after the dinner hour. This last has been a difficult rule to bring into force at first, but a good many firms who break it have been prosecuted and are now conforming.

Overtime is not worked in factories to so great an extent as in workshops, and if the two are taken together, considerably more than two thirds of all the overtime in the kingdom is worked in the making up of wearing apparel; if this latter occupation is considered alone, workshops, *i. e.*, millinery and dress-making establishments, work nearly ten times as much overtime as is worked in the great clothing factories. As Miss Abraham reported several years ago, there always have been among employers in season trades "firms who by wise management meet, without recourse to overtime, the demands of their customers and the competition of others in the trade," and this should "remove the seeming conflict of interests between the gratification of some few hundreds of inconsiderate people (customers) on the one hand, and on the other hand the health of several thousands of women and girls." Since these words were written, the employment of girls and boys under eighteen in overtime in season trades has been made illegal, so far as I know with general satisfaction. Laundries are under a much more elastic scheme of hours than other factories and workshops, and the period of employment may vary from day to day, and very excessive spells of work are reported to be often found.

The employment of children as half-timers (*i. e.*, alternately morning and afternoon, or on alternate days in school and factory) in factories is at the present time, far more than overtime employment of adults, a subject of interest to the general public. An agitation in the press has been in progress for some time in favor of raising the age of employment of children from eleven to fourteen years, or even higher. The Lancashire operatives, whose children form the largest single section of the whole body of "half-timers" (namely 29,506 out of 53,256) in textile industries, seemed until lately to be the chief opponents of any change in this direction. These workers were, however, represented in the Trade Union Congress of this year, which has passed a resolution in favor of the change in question. It was in 1895 that the women inspectors reported as follows:

> While we feel that some reform in this direction must before very long be attempted, we are anxious to express our hope that when an alteration is made it will be of so thorough a character that it really affects its end. A simple prohibition of employment without any increased control of the movements of the children through improved requirements as to school attendance, may simply mean that the children pass into uncontrolled occupations —for instance, as errand-boys and girls, newspaper boys, sweepers, etc., in shops. Any change would be most undesirable which merely tended to swell the ranks of these classes of workers with the children who are now at least under some kind of supervision in the factories.

Factory legislation began in the year 1802 with an act to provide for the health and morals of children as "apprentices" in factories; in the last decade of the century it is still an unsettled question in England whether children shall have their best, growing years completed in school and playground before beginning the struggle of life as bread-winners.

(End of Required Reading for December.)

WOMAN'S WORK IN THE WAR.

BY ETTA RAMSDELL GOODWIN.

MRS. PORTER.

NEARLY every woman in the United States would have liked to change places with the men who put on the uniform last spring. They did not want war and they did not want their men-folk to go to war, but they had their little savage wishes nevertheless, and to be a soldier and a fighter to each feminine imagination seemed to be the most desirable thing in all this world. As she could not be a fighter, the American woman was inspired by the conviction that the career of an army nurse was the career for which she had come upon earth. The prospect of wearing a becoming uniform and fanning sick officers doubtless was what inspired some of the many thousand who made application for positions as nurses, but with the majority it was simply the unconquerable and passionate wish to do something, to have a part in the great war work. All women could not be nurses, nor the mothers of nurses, but those who stayed at home found an occupation, and in spirit they all took for their motto the war-cry of the women in the state organization of the Red Cross Society in Minnesota, not "Remember the Maine," but "Remember the Men."

Some time when the public is tired of its investigation committees and has wearied of the task of trying to fix the responsibility for some of the unnecessary hardships suffered in the campaign it will have the time to ponder over the fact that there has been no need for investigation committees when there has been a question of the work that women have done in this war. Civilian appointments into the service of the Red Cross have not been the occasion of public

howling. The officer-women have developed unexpected executive strength and intelligence, the privates heroic endurance and zeal. And the officers among the women have not hesitated to become privates when occasion came and to depart from the work of giving orders to the sphere of personal service.

Miss Barton's work on the field of Santiago consisted partly in directing others, but that did not prevent her from walking about continuously for several days in the rain and almost knee-deep in mud, searching for wounded men in out-of-the-way corners of the battle-ground and many times cooking with her own hands the food that saved their lives. Helen Gould was assistant director general of the Woman's War Relief Association when her predecessor in the office, Mrs. Ellen Hardin Walworth, was transferred to Camp Wikoff, and she was showing consummate business ability which was almost as valuable to the society as what she gave in money; she was establishing diet kitchens; she had turned her home in Irvington into what she called a quartermaster's department, where all sorts of schemes to provide comforts for the soldiers were being carried out; she was establishing resting-places where soldiers who were adrift in the city could find shelter, and she was giving of her fortune sums of money which in all amounted to at least $130,000, but she never was as happy as when she was able personally to minister to the sick and needy, to find out what was wanted and to supply that want then and there. Her sweet presence and exquisite smile, kind, handsome eyes, and trig, slender figure always will be remembered by the soldiers who were quartered in the hospitals near New York, but it is to be feared that the public will never have an opportunity to become acquainted with the features of this popular heroine of the war, as she has never allowed her photograph to be given to any publication and no authentic photograph of her has ever appeared in print.

When women went into the camps the death-rate decreased. Gen. Joseph Wheeler has called women "the power behind the men who stood behind the guns." Lieut.-Col. Charles Dick of Ohio, the good friend of President McKinley, admitted to one of the officers of the Red Cross that what comforts the soldiers had in the war came from the Red Cross. A few thousand of our men have taken the trouble to put into writing their gratitude to the vast relief organization, some going so far as to express their conviction that the relief that came to them through the Red Cross saved them from actual starvation, and it has come to pass that even the medical department of the army, which took a strong stand at the beginning of the war against the admission of women into the field of army work, handsomely have abandoned their position and have acknowledged that women have earned the right to help to run the relief work machine.

The most significant example of this change of ground was shown in the appointment of a woman to the position of acting assistant surgeon with the rank and pay of captain in the United States army, and perhaps Surgeon-General Sternberg did not fully realize the importance of the step he was taking when he presented the commission to Dr. Anita Newcomb McGee. It happened in this way. At the beginning of the war the Daughters of the American Revolution felt that, owing to its splendid organization, their body was particularly well fitted to carry on a systematic scheme of war work. The different chapters recognized as an appropriate duty the task of caring for the families of soldiers and sailors, but the organization as a whole was ambitious to be distinguished for some special service. At the suggestion of Dr. McGee it adopted the plan of providing a reserve corps of trained nurses upon which the government could draw according to its need. The visions of the projectors of the plan were far-seeing enough to prevent discouragement even in the face of the announcement made to them by the surgeon-general, which in part read:

No trained nurses are needed at present and I am uncertain what our requirements for the future may

DR. M'GEE.

be. It is not my intention to send any female nurses with the troops to Cuba, and in case we have a number of general hospitals established I expect to depend principally upon our trained men of the Hospital Corps for service as nurses in the wards.

The trained men referred to numbered about fifteen hundred souls. Knowing this, the D. A. R. Hospital Corps committee, which consisted of Dr. McGee, Miss Mary Desha, Mrs. Francis S. Nash, and Mrs. Amos G. Draper, went on with their work, giving to it more than twelve hours every day through the most trying summer that Washington has known in fifty years.

In addition to the Hospital Corps affairs there was business of importance in connection with the contributions which came pouring in from D. A. R. chapters in all parts of the country, sometimes in the form of supplies and in some cases as cash contributions. The total amount received in money was $50,000. Five thousand nurses were examined by Dr. McGee. The examinations were so rigorous and in consequence the grade of nurses passed proved to be so high that the medical authorities in the army not only called upon the reserve, but recognized the value of the system through

which they were admitted and straightway established a rule by which all nurses taken into the employment of the government were obliged to be examined by Dr. McGee. She virtually became the head of a regiment of nurses, Protestant, Catholic, white, negro, and Indian.

MRS. GLENN.

There was a question of technical difficulty, however, in the possession of this authority by a civilian over persons who were enrolled in the service of the government, and Dr. McGee's commission came as the solution of this difficulty. She is the first woman ever formally appointed into the army as an officer. She was invited to the council of surgeons in Camp Wikoff, and in every way she has received in army departmental quarters the respect and attention to which her office entitles her. The newspapers tried hard to dress her in a uniform, with shoulder-straps and brass buttons and short skirts ornamented with stripes, but in reality the idea of wearing a uniform never presented itself to her. She does wear bicycle clothes, even when she is in her office in the War Department, but it is because daily exercise is almost part of her religion, and her bicycle ride to and from the department is the only form of exercise for which she finds time now. She is a very beautiful woman, and although she has a little daughter ten years old she is a mere slip of a girl in appearance and it requires hard thinking to realize that such a girlish creature can be a high official under the government, a physician of prominence, an astronomer of international reputation, and the author of "Generations of N-Dimensional Space."

Nearly all the relief work in the war was carried on under the auspices of the Red Cross. Washington is the home of the American organization, but the center of activity in war-time was in New York, where the American National Red Cross Relief Committee was instituted with Rt. Rev. Henry C. Potter, bishop of New York, as chairman, in order to raise the necessary funds. Auxiliaries sprang up in New York and in nearly every part of the country, until at least eighty-nine were sending contributions. One of the most famous of these auxiliaries is known as Auxiliary No. 3. It has been a society for the maintenance of trained nurses and it has had among its members Mrs. Bayard Cutting, Mrs. Whitelaw Reid, and Bishop Potter's daughter, Mrs. Winthrop Cowdin. Its record for this summer is superb and it still is maintaining nurses at Fort Wadsworth, Fort Monroe, and in several other places.

The Red Cross women are exceeding proud of the system by which they work, and

especially of their relief ships and the manner in which they are loaded, because, owing to this system, perfected by Miss Barton, they carry all the honors when compared with the supply ships of the government. When a ship is to be loaded Miss Barton causes an exact plan to be drawn of the vessel, with dimensions marked. As supplies are carried on board the spot corresponding to the location in the ship is marked in the plan and the quantity also is registered. When anything is taken away the amount is recorded and confusion is unknown. The relief ship *State of Texas*, which, with Miss Barton on board, made its dramatic entrance into the harbor of Santiago after the great sea fight, carried a group of unusually interesting women. They were Mrs. John Addison Porter, wife of the secretary to President McKinley, Mrs. Bettina A. Hofker Lesser, the wife of Dr. A. Monnae Lesser, and Mrs. Joseph Gardner, whose husband gave that mammoth farm in Indiana known as Red Cross Park to the society. Mrs. Porter was with Miss Barton from early in June until after the first of August. She left her husband, who was quite as enthusiastic as she was, and her two little girls in order to carry out her patriotic mission. She showed how plucky a society woman sometimes can be; she risked fever at Siboney, replying to Miss Barton's remonstrance when she expressed her intention to go into the infected region: "If you can take the risk I can"; and she learned the Red Cross lesson, which is to go without meals and without sleep if the necessity comes, and to do it cheerfully. She was present when Colonel Roosevelt made his famous application to the Red Cross for dried apples and other stores, when he refused to move until they were given to him, and she helped to pack the burden of provisions on his broad shoulders and back.

MISS HAWLEY.

Mrs. Lesser, the magnificently beautiful woman who was sister-in-chief in the New York Red Cross Hospital before the war came and who is a graduated surgeon, was put in charge of the hospital tent which was established on the field of Santiago. Mrs. Gardner volunteered to act as cook, and it was she who prepared those health-giving gruels and the great kettlefuls of rice with prune sauce—a species of ration of which Miss Barton greatly approves. Mrs. Lesser stayed at her post until, in company with her husband and six nurses, she was stricken with yellow fever. She has recovered, but with the loss of much of her former vigor.

MRS. TANNER.

From the beginning of the war until the end and after, women who wanted to work for the cause of patriotism found plenty to do in Washington. The capital city did not contribute much to the cash funds of the relief societies, but money came in from other cities and women easily were found to see that it was well expended.

The attorney for the Red Cross is a woman, Mrs. Ellen Spencer Mussey. She is dean of the Washington College of Law, the only school in the District where a woman can take a course in law, and every one gives her the credit for many of the changes in the laws in the District governing the property rights of women. Mrs. Mussey is a charming woman, and in the midst of the war commotion and the added rush of business connected with the Red Cross, she was quite as likely to be found on her way to one of the army hospitals with her arms full of flowers as in her office. Mrs. Tanner, the wife of "Corporal" Tanner (one of the most frightfully wounded of all the survivors of the Civil War), is another exceedingly valuable member of the Washington committee. She is president of the Ladies' Union Veteran Legion, and she made it an auxiliary of the Red Cross. She began her war work with visits to the army hospitals, and especially to Fort Monroe, where she attended to the distribution of supplies for the first wounded in the early July battles, which were brought to Fort Monroe on board the *City of Washington*. Of her summer's work in Washington she says:

DR. GREEN.

On my way to the boat one Sunday night I saw standing at the corner of the crossing at Seventh Street a train-load of sick soldiers, many of them lying on straw spread on the floors of the baggage car. Their train had stood there all the afternoon and it stood there until far into the night. For them the poor people of the neighborhood had taken dinners from the Sunday table, sheets and pillow cases from the beds, and change from their pockets. When the Red Cross arrived I was appointed with full power to look out for the needs of other cases. Two rooms were hired as headquarters from which to distribute supplies. A dozen gallons of milk, a small box of sandwiches, a couple of boilers of coffee, and some oranges were provided, and with half a dozen helpers we sat down to await the sick. They came; the very sick, the convalescent, and the well who were hungry. They came by thousands, and we were powerless to draw lines. All must be fed, and the work grew to enormous proportions. Our bread was bought by the hundreds of loaves, our butter and sugar and coffee by the hundreds of pounds, our milk by the hundreds of gallons, and the roll of helpers ran up to more than a score. It was no unusual thing for the workers to toil until two o'clock in the morning, only to be awakened at four for further duties. The sick who were so ill that it was desirable that they should be removed from the train were taken to hospitals.

Mrs. Tanner and Mrs. Mussey were the women who made the famous fight for the diet kitchen at Fort Myer and came out victorious. The Red Cross had dreams of

diet kitchens in every one of the army hospitals, but the medical department was against such schemes. The Red Cross women repeatedly went to the head of all things in the War Department, and finally Secretary Alger granted them permission to try their experiment. They were not encouraged; they were suffered to come. Their application for the use of a large and well-equipped kitchen which was unused during the entire summer was refused, but they built them a little frame structure for a kitchen and put up a little tent beside it, and Dr. Mary E. Green, who already had started a diet kitchen at Fort Thomas, was put in charge. No one knows more about the subject of diet than Dr. Green. She was judge of food products at the World's Fair, is president of the American Household Economic Association, and has lectured on dietary subjects from one end of the country to the other. In Fort Myer the tent was her home and the kitchen her workroom. She had three assistants, and soon the great hospital found itself supplied with gruels and jellies and custards of such a quality that the diet kitchen came to be known to the soldiers as "heaven." Sixteen gallons of milk, fifty pounds of chicken, forty pounds of beef, and the same quantity of mutton are some of the items in the rations that the Red Cross daily was giving to the patients in the hospital. The surgeons were demonstrative in their gratitude, and before long the War Department itself recognized its debt to the diet kitchen and pledged itself to reimburse the Red Cross for what it had expended.

Some of the free lance assistance given by women not regularly connected with any relief organization is worth telling of. Miss Harriet Hawley distinguished herself as much as any one and she has become famous for her war career. She has been interested in soldiers since she was a child, when her father, who at one time was adjutant-general in Minnesota, used to take her to the state encampments, where she was made a sergeant in Company B, Thirteenth Minnesota Regiment. Early last summer, when every day train-loads of soldiers would be side-tracked in Washington, Miss Hawley made it a duty to see, as far as one young woman could see, that the soldiers were

MRS. LESSER.

MRS. MUSSEY.

not hungry soldiers. She opened her home as a resting-place, and the quarters offered not being large enough she asked for the cooperation of several other women, hired rooms, solicited subscriptions, and established the "Soldiers' Rest." When the scheme was on a successful working basis the founder left it in charge of Mrs. Babcock, wife of Representative Joseph W. Babcock, Mrs. Mary F. Case, Mrs. Clifford Howard, Mrs. W. H. T. Simmons, and others, and went to Camp Wikoff, where she did splendid work in the quietest, gentlest way. She defied risk of contagion in the detention hospital, used her brains in contriving plans for the comfort of the soldiers and her will in getting them carried out, and left a memory of tenderest, sweetest service in the hearts of the soldiers.

Mrs. Glenn, who went out with the District of Columbia men, did not undertake to "mend, darn, wash the clothes, and see to the sanitary condition of the men in her command," as the bill which Senator Faulkner tried to have Congress pass prescribed as the duties of an army matron, but she did much more than that. She went with the regiment in order not to be separated from her own boy, and at Chickamauga and later at Camp Wikoff she did for the other lads what their own mothers would have done if they had been there. Her special attention was devoted to those patients suffering from the illness whose unscientific name is "homesickness."

Among the women martyrs of the war was Miss Reubena Hyde Walworth, who gave up her life on October 18, dying from fever, with which she was attacked while at Camp Wikoff. She was the daughter of Mrs. Ellen Hardin Walworth, director general of the Woman's National War Relief Association, and was one of the most enthusiastic workers in the hospitals. When the war broke out she declared that as there were no men in her family (a family of famous soldiers) she would do her part in the war as a nurse, and she took a course of training to prepare herself for her work. She and Miss Wheeler, the daughter of General Wheeler, were fellow workers in the hospitals.

THE EDUCATION OF BOYS IN ITALY.

BY MARGHERITA TRAUBE MENGARINI.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE ITALIAN "NUOVA ANTOLOGIA."

THE comparative study of education in the various periods of history would illustrate very well what the Germans call the *Zeitgeist*, the spirit of the age. Such a study is important in order to know our modes of thought, our tendencies, and our aspirations. In our modern craze for education, started by Rousseau, the first thing that strikes us is the insistency of which our sons are victims. It is practically an unceasing persecution. They are no longer allowed to do anything on their own initiative. Rousseau says: "As soon as the child is born take possession of him, and don't leave him again until he is a man. You will never succeed unless you do this." The present educational fashion differs somewhat from Rousseau's ideal, yet is not less harmful on that account. We are morally superior to him, in that we no longer allow ourselves to set traps for our boys with the object of perfecting them. But Rousseau tormented his pupils much less than we do, because children were not so expensive in his day. They cost us too much now, physically, morally, financially. Our constant preoccupation for their education and comfort, our way of looking on them as precious and fragile objects are manifest signs of a general decadence, which have their counterpart in the diminution of births.

Fortunately the problem of education is a thing which concerns the cities alone. The country people still maintain the old method of education that has existed comparatively unaltered since the origin of our race. Nor have their affections undergone such sudden transformation, so far as we may judge from the history of human passions. Their children are well when they are well nourished and ill when they lack food. We hope that compulsory education may prove an advantage to them, as it has in those countries where the inhabitants of the rural districts read the Bible and useful, instructive books. But when we speak of physical education we must not forget that our country people look out for their own to perfection, without instructors, without those games that are more or less English. Not yet degenerate, they feel their real needs much better than we. The countryman instinctively understands that strength and circumspection are of more use to him than agility and discipline, which are the causes of our nervous debility.

Any one who has practiced gymnastic exercises or had military drill will recall the great strain on the will and attention that is necessary in order to respond quickly to the word of command. These must be precious qualities for armies, but it is doubtful if they benefit individuals who live freely in the country. That the countryman is not in a hurry is necessary to his preservation. I remember that a German physiologist asked me one day how in the world the Italian peasants succeed in digesting so much *polenta*. I answered, "Because they eat slowly." Any one who has noticed how the peasants eat will say that I am right. A man living in the city will have finished a plate of food before the peasant has swallowed a mouthful. The capacity for chewing the food keeps pace with the loss of a good digestion among the inhabitants of the towns.

Children in the city are truly to be pitied. After the cares of the first years have passed, seasoned with cod liver oil and iron, they begin their studies in the kindergarten. If this were a real garden, where they could do everything they wished, within the limits of personal safety, it would be a fine institution for all work-

ing mothers. But kindergartens are simply privileged institutions for putting the first bridle, the first check, on individual initiative, for clipping the wings of the child's imagination. To give an idea of Froebel's system of education we need only cite at random a part of the index of the kindergarten manual: "The ball in the education of the senses; The ball in mental education; The ball in moral education." The first plaything which Froebel gives the child is a ball, which should be hung over the infant's cradle, to supply food to his mind, as it were, and also for the purpose of not allowing him to be idle for one moment in this, his initiation into education, at the very instant when his physical faculties begin to show themselves. When the time for cutting his second teeth has come, the child is already enrolled in the elementary schools. And here I know, by my own experience, that a boy of only moderate intelligence who is educated at home can easily obtain in two years, by studying one hour a day, the same results that the great majority do in five years and with four hours' daily schooling. After these five years, in which the teachers have done all they possibly can to deprive the boy of his natural happiness and joy, after a first attack on his constitution has been made by keeping him in unwholesome surroundings, the poor child enters the high school, where a noose of theoretical and practical knowledge is forever hanging over his head.

However much the programs of the secondary schools may have been revised and modified they can never form a logical whole. The defect lies in their origin, in the disparity of methods with which the various branches are imparted, in the mistake of believing that secondary education is a complete schedule of the scientific trend of our century. The first and most important instruction, that of the classical languages, is a remnant of the fashion prevailing in the first part of this century. It was then that Bopp created one of the most noble branches of science, the comparative philology of the Indo-Germanic tongues. Pedagogy, which in the Germany of those days was wholly based on philology, made a fashion of this science in the secondary schools, and with Curtius' "Comparative Greek Grammar" the teaching and study of the classics were undermined in a manner that is perhaps irreparable. Our boys now begin the study of Latin and Greek elements, which they do not know, by comparing them with the Sanscrit, which they will never know. Thus they go over all the grammar, and when they have finished it they can remember nothing of it because the base, which is the natural one of all learning, is lacking, the only true science of memory, namely the strong impressions left on the brain by conceptions which strike the imagination.

I know an instructor who advises one to begin the study of any language whatever by merely reading and repeating some of the finest chapters of the Bible. This method of engraving a thing on the brain, as letters are sculptured on a rock, has this advantage, that rules learned with the words are never forgotten. The present method of teaching the classical languages was not introduced into the schools for pedagogical ends, but only out of love for a modern branch of science. Comparative philology is certainly a most noble study, but it was wrongly applied and in a place where it should never have entered.

The teaching of the natural sciences is likewise the result of the latest scientific fashions, and corresponds with sound pedagogical principles even less than comparative philology. The astonished boy must learn the physiology of sounds by studying languages together with the effects of the parallax; he must be present at experiments in physics and chemistry after having filled his head with classical reading. This style of instruction deprives the boy of the capacity for being surprised at nature's phenomena, by bringing them to his attention before he has reached the age of grasping them or investigating them. Instead of exciting the spirit of observation in him we labor to deaden it. He finally looks on repeated experiments with a weary

eye, and instead of receiving a fresh stimulus from them they remain with him as the impressions of facts seen but not understood, real callous places on the brain, making it obtuse to new impressions. We should not do violence to the child's brain by filling it with things for which it is not yet ripe.

Just as the experimental sciences have been introduced into the secondary schools because they are pleasing to us, so we have let the descriptive sciences fall into oblivion because these interest us now but little. But the descriptive natural sciences are exactly those which could better train the youthful mind to observation and accustom the youth to order and method. The same evil of carrying our modern passions into the schools is seen in regard to history. Historic sentiment is diminishing and irreverence for past generations is increasing. An immoderate idea of ourselves, or else invading jingoism, is urging us on to teach our sons modern history first and foremost, so as to furnish them with a foundation for a patriotic admiration of our forefathers. If we will only recall our own childhood we must confess that the deeds of Hercules and the exploits of the crusaders were much more sympathetic and easier to understand than modern political history. How shall boys grasp the importance of what is going on to-day if they do not know the past? They can never judge others equably if we begin to appeal to their self-love so early, by giving them to understand that their nation is the greatest, the one which has surpassed and still surpasses all others. But there is another evil, and this is that modern history taught in the schools necessarily becomes a history of political parties differently recounted by each one of these.

There remain the modern languages. No one certainly is so optimistic as to claim that the boys know French and German when they have finished school. And it appears that in Germany they are not better off than we are in this respect. The method of instruction is not the same in them as in the other branches; it is an improvement on the methods there adopted. It has more of the pedagogical element in it and anticipates in a measure theoretical and experimental science. But on the whole our methods are founded on the single idea of keeping the boy busy from morning till night, by not allowing him the necessary time for thought and still less any opportunity for acting in his own way. If they were to be used with backward students, these methods perhaps would be excellent, but this of course is not the case. From this constant surveillance, from this incessant prompting, which begins early in the morning and ends late in the evening, comes surely the dulness of the youthful brain. His especial studies now finished, the boy has become a man before he has even begun the real life of responsibility toward himself and toward others. University studies begin late and young men enter on their career late. If the manner of effecting this beclouding of the brain were not so efficacious there would be no reason for occupying ourselves so much with the educational methods in vogue. But we are convinced that a strong brain and an iron will are needed in order to remain capable of energy and initiative, in order to still be independent after having undergone this false and forced education, which begins at the age of four with the kindergarten and ends at nineteen with the high school. To diminish the burden of the school programs and bring back the teaching of the classics to its primitive simplicity are the most urgent reforms at present. The pedagogue who merely refrains from introducing new things and takes away some of the old might be exalted to the rank of the most beneficent legislators, who pass no new laws, but abolish one already existing.

The methods of our education are the same as those that obtain in the other countries of Europe. The English alone make an exception that is worthy of note, for they occupy the boy to a much less degree, and, better than all, do not preoccupy him in the least. But the English

also arrive at harmful educational results in other ways, in sending the boy away from his family. Rousseau, too, went this road. He wished to remove the boy from the contagion of city life, and thus took him away from family influence. By putting our sons in the hands of people who are incapable of understanding their instincts and still more incapable of valuing family traditions, we expose them to the torture of a theoretical education, which, being based on general principles and not on the individual case, will be the more pernicious as the boy to whom it will be applied is the more individualized.

With the exception of a scientific education there is no question of pedagogy which can be solved in a general way, not even the question of corporal punishment. The sequestration of a boy in a boarding school carries with it the grave consequence that he does not become acquainted with his parents. He is cut off from family tradition. Boys in such schools are bound to learn everything from books and not from their own experience, nor the experience of others. This already constitutes a diminution in the sum total of wisdom to which a man may aspire.

The manner of the modern life, which possesses us all and rules our thoughts and our actions, is open to every one, formidable in its egoism and, like it, small and vulgar in all its manifestations. It is the style of a rented house, where nothing is made to stay. Even our friendships, our memories, our habits, and our customs must be movable. So our children are born as it were in a rented house, and grow up in an atmosphere of perpetual change —change of lodging, change of school, change of masters and friends. Little wonder that their faculties rarely arrive at that clearness of vision which was the characteristic of the old system of education.

After the education in the school has taken from the boy every idea of initiative, he reaches the point when he finds himself as a young man face to face with the world, that world with which he has truly never had the time to put himself in contact. With an overloaded brain unsupported by any tie of tradition, feeling hereditary instincts working confusedly in himself, instincts which he cannot understand, he finally begins to study himself and so loses time in getting acquainted with his surroundings. He will find in the daily newspaper, in the books of art and science most in vogue, a certain number of directing ideas and motives which all follow and which will drag him also into the common current that he is unable to resist.

Never have so few dominant ideas invaded everything as to-day. The nations are imitating one another blindly, just like individuals. The differences of race are being attenuated, and the tendency toward imitation is steadily increasing. Modern society reflects the condition of our young men, when they come out from the artificial life of the schools, incapable of making a way for themselves and of living their own lives. It is not through any spirit of solidarity that we assume the errors of others as our own. It is through the hypnotism of the dominant ideas which each one feels for all the rest. The intellectual man seems more affected by cosmopolitanism than the others.

Among the tendencies that now rule Europe is the absurd one of wishing to teach things that are innate. Froebel teaches the newly born infants to use their little hands and accustoms them to fix their gaze on an object. Bourget, with his psychological school of novelists, teaches us to know our own heart. There is a savage people which, in order to honor a guest, chews up rice and puts it in his mouth. This is the ultimate limit to the check we put on individual initiative, a limit we have not yet reached. If we can do violence to our tendencies and modify our system of education so that young men may think with their own mind and approach life with a clear brain and sound nerves, they perhaps may some day be capable of making society enter on a more wholesome career than that in which it is now enlisted.

THE BARRYS.

BY SHAN BULLOCK.

CHAPTER III.

FOR a couple of hours, maybe, after the time of Hugh's going, Frank sat warming his thoughts in the glow of the peat fire; at last finding his eyelids heavy, rose, lighted the candle, blew out the lamp, and started for bed. The hall was in darkness; his steps rang on the flags; uncannily harsh came the shrilling of crickets from the kitchen hearth; the white steps of the stairs creaked and started beneath his feet; solemnly the clock on the landing ticked out the flying hours; with his candle raised, Frank hastened along the corridor, escaping, so you might think, from the silence and the ghosts.

Deep among the feathers in the mahogany four-poster, he slept well and long; woke at last in the fulness of the morning light. Across the bed-foot the sunshine fell golden; through the open window the air streamed wholesome; the house hummed with work and hurry; outside the cattle were lowing, the pigs squealing, the cocks tossing their shrill notes to the sky.

For a while Frank lay staring at the ceiling, thinking of Nan and her oval face, of Hugh and the exploits of the Prodigal; then fell to reading the texts on the wall, then to admiring the simplicity and cleanliness of his room—the shining plaster walls, the white floor with its strip of carpet, the wondrous patchwork counterpane, the spotless curtains, blinds, linen; at last, nine o'clock sounding from the clock on the landing, sprang out, dressed quickly, and hastened down stairs.

At the parlor door he paused; turned to the left and into the kitchen. On the hearth burned a great fire below a row of pots and kettles. Here and there about the cement floor were stools, painted chairs, chests, a large deal table, a high dresser shining in its array of tin and crockery ware; on the smoke-browned walls hung harness, guns, whips, hay-twisters, shears, sieves, almanacs; in the chimney corner were shelves laden with medicine bottles, ointment jars, physic tins; from the rafters hung flitches, hams, strings of onions, dried fish, bundles of herbs. And there by the dresser, her skirts tucked up, arms bare to the elbows, face shining with health and work, stood Sally crashing the heavy beetle into a tub of steaming potatoes.

At sight of Frank, Sally turned, let fall her beetle, and volubly gave forth her morning greetings. Aw, the height of the morning to him; aw, but he was like his father; aw, but she hoped he had slept; aw, but he was welcome to the ould country; aw, but he must be dying for his breakfast. So Sally rattled on, and smilingly Frank, with his back to the fire and his legs spread, listened to it all; smilingly, after a while, followed Sally and her tray up into the parlor. And there the firelight was dancing on the walls; the table drawn close to the hearth, spread with a snow-white cloth and set with flowered china and gleaming cutlery, with fresh soda cakes, crisp oaten bread, with jam and marmalade; and in the fender Frank's boots lay a-warming; and in the corner smoking-chair and paper awaited his pleasure; and last and best, on his plate lay a letter from Marian.

At sight of it all Frank's impressionable soul swells glad within him. He rubs his hands. "Why, Sally," says he, "this is mighty good; this is a real home-coming. Good luck to you, my girl." And Sally, flushing through her wrinkles, looks up admiringly, hopes God may bless Mr. Frank, wishes him a good appetite and all to his liking; then backs to the door and leaves him to his letter and his breakfast.

Frank took the letter from his plate, tore it open, and standing with his back to the fire, read it through. He seemed very content. Now and again he murmured a sen-

tence, repeating it softly and caressingly; now looked toward the window, a tender light shining in his eyes; at last, carried his letter to the table, propped it against the teapot, and, as he ate, read and read it again. "Dear Maid Marian," he said; presently took from his pocket-book a photograph and stood it by the letter. "Dear Maid Marian," said Frank; and as he looked his face was radiant.

He finished his breakfast, put the letter away, and, with the photograph in his hand, sat him down before the fire. He felt home-sick—call it lovesick. He wished he could see Marian, just for a while. Ah, he liked her so well. Ah, how the lovelight shone in her eyes that minute of the parting; how vividly he remembered her face, that living face, set in curls, firm, steadfast, beautiful, lighted with a pair of blue eyes. "Dear Marian," said Frank, "dear Maid Marian"; so sat lost in reverie, nor moved till the sound of old Hugh's voice came ringing from the hall.

Hastily he put away the portrait, rose, and met Hugh at the door.

"The top o' the morning to you, uncle."

"Same to you, lad." Hugh came in, crossed, and sat down. "Same to you. So you've got from the blankets at last. Why, you look better already. What is it? You look fresher, healthier. Ay, ye do."

Frank laughed. It was only the result of a good sleep, a good breakfast, he feared.

"Ah, maybe so. Ye slept well? That's right. And ye had a good breakfast, ye say?" Hugh glanced round at the table. "Why, heavenly hour, you've eaten nothin'. Ah, ye needn't talk; I know what there was before you began. An' now. . . . Here, Sally, Sally," roared the old man; then as Sally came running in, rose and pointed scornfully at the table. "Look what's happened to your breakfast, Sally. One egg gone, one bit o' bacon, a piece of toast, a slice of bread, an'—Yes, I declare to heaven, "said Hugh, raising the teapot, "it's nearly full." Sally threw up her hands. "Aw, Mr. Frank, Mr. Frank, dear," wailed she, "what ails ye at all, at all?" Frank, not daring to smile, stood shifting his weight from one leg to the other. Hugh looked at the table for a moment; then wheeled round.

"Why, what kind of mortal are ye?" he asked. "Or what kind can your inside be? Is it spoon-meat they give ye in London, or what? Here; let me feel ye." He gripped Frank's biceps. "Lord, Lord!" said he, "like butter they are." He ran his hand along Frank's legs. "Lord, Lord!" he said, "the spindles they are. Come, get on your boots, Frank Barry, an' come out till I make a man o' ye. Come out, I say; for, by the king, if ye don't eat your dinner like a man I'll stuff ye like a Christmas turkey. Come on." And, whether he liked it or no, out Frank went.

It was a bright morning, keen with the savor of an east wind, yet holding, nevertheless, a promise of spring. The air was clear, full, bracing. Far off the mountains stood out long and blue against the sky; the hills lay huddled about the valleys; nearer still were the familiar fields, rough and barren, small and irregular, set with whins, rushes, hedges, dotted with white homesteads. On the grass the frost still glistened. The peaceful sounds of country life—dogs yelping, cattle lowing, children shouting, carts clanking along the roads—came clearly. In the distance Lough Erne gleamed away between its wooded shores; gleamed like silver in the morning sun.

"Ye don't have views like that through London chimney-pots," said Hugh, stretching an arm across the paddock gate.

"Nor through many other chimney-pots," answered Frank; then turned and followed his uncle across the yard.

Beyond the yard were the outhouses; the byre full of store cattle, the dairy sweet and cool, the stables with their rattle of chains and stamping of hoofs, the barn above the byre with its heaps of chaff, piles of straw, sacks of grain; through all these went Hugh, thumbs caught in his waistcoat pockets, hat back on his crown, his tongue busy with explanation and comment. So much the cattle were worth, so much that roan horse cost, such and such was the pedigree of that short-horn bull; thus and so on. Behind the offices was an enclosed

yard lined with sheds, tool-houses, piggeries; beyond this lay the haggard, beyond that again the orchard; through all these, Hugh, still talking, led Frank. Badly that yard wanted paving. Why did not Barney, dang the fellow, hurry and feed those pigs? Let Frank take a sniff of that old hay. Ah, 'twas prime, sir, prime. And now let Frank turn up his trousers and come for a tramp.

So Frank started for his tramp; and, for a while, his going was not pleasant. His boots were thin, his clothes light; soon his feet were soaking, his trousers muddy to the knee. There was never a path, never a field that was not saturated. Up and down, here and there, through gaps and rushes, over hedges and ditches; oh, 'twas a weary tramp. And all this weary talk about things agricultural! What cared he whether such a field had been in turnips two years ago, or whether, with God's help, such a field would next year be plowed for oats? How the deuce could he care, with his boots, his boots. . . . Oh, it was infernal!

For all that, Hugh was relentless. From field to field he went, from hill to hill; through rushes and clay and mud tramped Hugh, splattering, grunting, puffing. At last, when about half the two hundred acres of Ryfield had been traversed, he halted on the crest of a hill, and there seated himself on a stump.

"That's a good view," said he, and looked toward the lake.

"Yes," answered Frank, with his eyes on his boots. "I suppose it is."

"Suppose? It's a danged good view, that's what it is. D'ye see Lismahee away yonder? There's Louth Castle beyond in the trees. That's Bunn town you'll be seein' across the hills. They call that country Gorteen over there—Orange Gorteen. That's Inishrath Island below there between the ferries."

Frank looked up quickly.

"Indeed?" said he. "Where Nan—where Butler the ferryman lives?"

Hugh found Frank's eyes.

"An' what do you know about Nan Butler, may I ask?"

Again Frank looked at his boots.

"Oh—very little. She ferried me over yesterday. That's all."

"Ay. An' was the father with her?"

"No."

"Ay. Well, all the better. He's a windbag, a good-for-nothing, a cumberer of the earth. Bah! The name of him riles me. I want to talk no more about him," snapped Hugh; "about him or his. Them's a nice pair of boots o' yours," he went on. "'Twas in London they were made, I'm thinkin'."

"They were never made for such—such confounded usage as this," cried Frank. "They're ruined, simply ruined."

"They look it," answered Hugh. "An' your feet's wet?"

"Soaked."

"All the more reason we'd be movin.' Look here, my lad," said Hugh, rising and laying a hand on Frank's shoulder. "I've been watchin' ye. I'm sorry your feet are wet, but the Lord made ye for a man. Try not to disappoint him. Ye hear me?"

"Yes," said Frank shamefacedly. "Yes, I hear"; and thereafter Frank strove his man's best.

True, his best was not brilliant; still, he did strive, and as reward soon found enjoyment in his ramble and in his uncle's society. After all, he told himself, matters might have been worse. The scenery was good, the air excellent, the sun and wind exhilarating; there was pleasure to be had even in boldly essaying noisome places, in jumping ditches and venturing awesome drains; and, for the rest, was not old Hugh's talk delightful and himself a man worthy of study and admiration?

Really, mused Frank, this uncle of his was a fine old fellow. See him there, striding along as sturdily as might a man of fifty, head erect, eye bright and quick as a child's, his face glowing with health and the bounty of the open air. How well he talked, too, so clearly and racily; and how genuine was his pride in those fields of his, those flocks and herds. He looked a very king taking stock of his dominions. His eye reveled in all it saw; he talked of his land as another might of his mistress; his heart was given to the fields.

Yes, old Hugh was well worth the knowing, Frank thought. He was getting to understand him, to love him, even. True, he was not Frank's kind, was his exact opposite indeed; was somewhat uncouth, narrow, a man of affairs, of facts, a child of the soil; one who would quote you the Bible this breath and curse you the next, and hit you as quickly as he would do either; a man also who cared not for books, and called authors fools. Yes; that was Uncle Hugh. And Frank? Well, he was just the opposite of all that; was a child of the pen, a spinner of fancies, a bookish man, a man of mind. Yes. Still, were these inestimable qualities, call them superiorities just for the sake of contrast—were these to blind him, Frank Barry, to his uncle's virtues? No, no; that were to be crass indeed. On the contrary, did they not help him to a closer sight of these virtues; enable him pleasurably to listen (as he then was listening) to Hugh's talk, to look at things almost with his eyes? Ah, yes. Such were the advantages of width, culture; such the light which beat on Hugh and showed him so splendid an old fellow—a plain, honest, sturdy man; a real man; one with the heart and mind of a child; one whose yea was yea, and nay, nay, whom you could trust eternally. And this pride he had in his work, in his acres, this love for the inanimate fields, this delight in his freedom, health, vigor, this joy in the sun, and in the pure air of heaven—how these things ennobled the bounds of his narrowness and set him apart, set him far above the great throng of the workers of the earth! Here was your ideal worker; your ideal man, some might think. Often had Frank read of such, seen such lauded in speeches and leading articles as saviors of the country and pillars of the state; and there, there walking by his side, was one of these, this same old Hugh Barry.

Well, well, thought Frank, and glanced at his uncle, just to think where his thoughts and his fancies had landed him. He smiled, shrugged his shoulders, muttered a word to himself. Round came Hugh's face.

"Eh?" said he. "What's that? What are ye grinnin' at, Frank?"

"Oh, merely smiling, uncle, at a thought I had."

"Ay. A thought, indeed! That's a novelty with ye. An' what's your thought?"

"Just this: the honor I am at in walking with a pillar of the state."

Hugh snorted.

"Pillar of the state!" shouted he. "Pillar of the state be hanged! That's another o' your danged newspaper fooleries, another o' your sprats to catch whales. Here, stop your blather; an' come till I show ye where I grew those turnips I was tellin' ye about. Come away."

So Frank, the blood now quick in his veins and his manhood assertive, strode on by his uncle's side, over the hills along the valleys; came at last to the stretch of reclaimed bog-land which lies in the hollow right below Ryfield House. And at sight of that Hugh's face beamed pridefully and his tongue waxed eloquent. There was the work of his life; the boast of his heart; the talk of the countryside. Handfuls of money he had scattered upon that. Ah, the drudging he had been at out there; the years he had spent. And now look at it; the best piece of land in all Ireland, and it taken every inch from the barren bog. He could grow more there than in the rest of Ryfield—turnips as big as creels, potatoes as large as turf, corn as tall as pitchforks. Ay, ay. He thanked God he had done that; it would do more for his memory than a marble tombstone. And at that Frank laughed.

"Why surely, uncle," said he, "it wasn't for the sake of your memory that you drudged?"

"Naw; it wasn't. But every honest man strives to leave the world a little better than he found it, an' there's my share. May yours be no worse, Frank Barry," said Hugh, and strode again for the hills.

In a while they came to a field in which two laborers were digging. They were only simple souls, ragged and forlorn, but their welcome of Frank was something to make glad the heart of any man. Both remembered his father, his uncles, himself as a boy. They would have known him anywhere,

they said; and sure but it's glad they were to see him, and it's welcome back he was. One of them was the Ryfield herd, a man of about sixty; and he once getting grip of Frank's hand could scarce let go. It was almost touching, his genuine pleasure; it was a lesson in manners to see how tactfully he asked after Frank's welfare, nor showed his real concern that a Barry should turn out so poorly, such a crooked bundle of skin and bones, with, aw, such a woful face. And was Mr. Frank staying long? Aw, only for a month or so; sure that was no time at all. But, sure, maybe he couldn't spare longer, so busy he must be over in big London. Anyway, might the sun shine on him all the days he was in Ryfield; "an' sure I hope, sir," said James, turning to Hugh, "ye'll be tellin' Sally to feed him o' the best."

"Oh, trust Sally for that James," said Hugh with a laugh; "trust Sally for that."

"Sure, I know it," answered James; "sure, I know it well. Well, good-by, Mr. Frank; good-by, sir, an' God bless ye. An' we'll, mebbe, be seein' more of ye?"

"Indeed you will, James," said Frank, turning away. "Indeed, you will. And God bless you."

The two walked a little way; then said Frank:

"It was worth coming to Ireland," said he, "if only for that welcome."

"It was," said Hugh. "It was. An' ye took it well."

"Took it well, uncle? Of course I did."

"Ay. Well, some people wouldn't; an Englishman for one. He'd think it was impudence an' blarney, an' a thing to be taken with a curl of the lip. Ah, a big mistake, a big mistake. But you'll do Frank, you'll do. I was watchin' ye, an' you've got the way wi' ye. Yes. But mind this, me son: always thank God for an Irish welcome, but pray God ye may never play it false. That's it, Frank; that's it."

CHAPTER IV.

THE remainder of that day slipped slowly and unimportantly away. Frank ate a good dinner; bent, all the afternoon, over the many pages writ in his crabbed mode of penmanship and his fluent habit of style of a letter inscribed to his dearest Maid Marian; did justice at tea to Sally's boxty pancakes, and thereafter till bedtime sat flushed and repentant before the parlor fire.

So that day passed; and the second was like unto it. The third was wet and forlorn. The fourth came and found Frank somewhat tired of the life at Ryfield. Over and over he had tramped the fields, and he was weary of them. Day after day he had heard the same discourse from his uncle, the same voluble reminiscences from Sally, the same good-hearted blarney from James the herd; day after day he had done, heard, seen the same things, and he was tired, somehow, of them all. The first fine delight of change and novelty was gone; he needed something fresh, something less eternally same. Farm life was very healthful, but so monotonous. It seemed to be all humdrum in Ryfield; rising, eating, drudging, going to bed; a continual running in a circle from the monotony of one duty to the dreariness of another. Always something was in hand; never, so it seemed, was anything being effected. Hunger and work, eating and rest; these made life at Ryfield, its pleasures and duties. Mother earth was queen in those parts; and her rule was stern, and her subjects slaves. And since the rain, cried Frank within himself, the fields were sloughs and the yard a mudhole; there was not a book in the house, not a picture worth the seeing; he could not write, think; oh, assuredly he must do or see some new thing. But how or where? Go with his note-book on a tramp of exploration? No; inclination leaped not that way. Go with Hugh in the tax-cart to Bunn; see fresh hills, faces, hear fresh shouts of welcome from hillside throats? No; little of change in that. Go, then, for a long walk; cross the ferry, say, tramp to Lismahee? The ferry? The Butlers and Inishrath Island? Yes.

The decision was pleasing. Immediately after dinner Frank buttoned up his coat, lit his pipe, with his hands in his pockets

stepped daintily down the lane and out upon the broad road. The day was gray and chilly; but as Frank strode his spirits ran high. Like a boy playing truant he felt.

He reached Garvagh ferry; there found nor man nor boat. Up and down the broad lake stretched between its wooded shores, cheerless and desolate. The sky hung low. The wind cried dismally among the willows, mourned in the oaks, piped sorrow on the hazel twigs.

Here and there Frank looked, searching for some one or something; and his search was barren. What to do? There was no flagstaff on that side. How then call the ferryman? Shout? It seemed absurd; but Garvagh was in Ireland. See Frank, then, roaring out into the teeth of the wind. Twice, thrice, he shouted; and neither effort set a soul astir on the island. Well, Frank was confounded. Oh, this Ireland, this eternal home of simplicity and haphazard! Mouthing, however, might effect nothing; let him rather try fortune westward along the shore.

It was a rough stretch of beach, thick with stones, stumps, stunted willows; not half a furlong of it had Frank covered when he chanced upon a cot lying among the rushes. A battered hulk she was, half full of water, oarless; moreover, was chained and locked to a tree. But does not youth conquer all things? And before twenty minutes were gone, had not Frank broken a link between two stones, baled out with a battered meat tin, and clumsily wielding a thwart as paddle, set off desperately across the depths?

Half an hour of vigorous paddling—and of some adventure, be it said—and behold Frank at last in Inishrath, the cot fastened to the pier and himself striding up a lane from the shore. For a little way there were trees on either hand; soon the lane was running up between tall hedges through the open fields. The track was muddy, the hedges untrimmed, the ditches broken; here a gate dragged on its pivot, there a gap was stopped with branches of white thorn; right and left the fields lay barren, covered with whins, rushes, stones; a desolate aspect, Frank thought, a sorry sight.

Some distance from the shore, the lane suddenly lost one of its hedges and became a mere grass track; and just there, in the remaining ditch, was a wooden gate, painted green, and beyond it a bit of garden and a thatched cottage. Frank leaned across the gate and spied about him. The garden was orderly, with trim hedges, a couple of beehives, some spring green-stuff, and a few early flowers. In the cottage walls were set a green door and four diamond-paned windows, two above and two below; house leek grew on the thatch, and on the sills were green flower-boxes. Was this the home of the Butlers? Frank asked himself, with an eye on the orderliness of cottage and garden. Was it the home of him who owned those desolate fields? he asked again, and looked across his shoulder. Just a minute he stood puzzling; then opened the gate, went up the garden, and knocked at the green door.

For a while he stood waiting on the step; then a foot sounded inside, a bolt rattled back, the door opened slightly, and a woman's head and shoulders came into view. Frank raised his hat.

"Excuse me," he said, "but does Mr. Butler live here?"

"He does," came back. The door opened a little wider.

"Ah. Well, my name's Barry — Mr. Frank Barry."

Back swung the door and Mrs. Sarah Butler stood revealed; a lean woman, sallow and sharp of face, black hair screwed into a wisp, arms bare, skirt bunched up beneath her apron, and a pair of heavy and muddy boots showing below her tattered petticoat.

"Aw," said she, wiping her lips with a corner of her apron; "aw, it's Mister Frank. An' me thought at first ye were the parson." She laid a flabby hand in Frank's. "I hope I see ye well, Mr. Frank," said she with a smirk.

"Thank you, I'm very well," answered Frank. "But are you Mrs. Butler?"

"Aw, yis, Mr. Frank; aw, yis. But ye'll be comin' in, sir?" She turned, just as

Frank was crossing the threshold. "John," she shrilled; "John, where are ye?"

"I'm here." Like a bull's was the voice that answered. "What's up?"

"Aw, it's not his reverence at all; sure it's Mr. Frank himself from London."

There came a sound as of a chair upsetting; the voice began rolling again, a door opened at the end of the hall, and out came him called John.

"What, what?" said he. "Is it Mr. Frank, ye say?" He looked hard at Frank; then, with his arm outstretched, came hurrying up. "Why, so it is," he roared, "so it is. Be the Lord, but I'm glad to see ye, Frank Barry! God bless me soul, but it's changed ye are. Why, how the divil are ye? Great king, to think it's your own self! Och, och, twenty long years. Why, the spit o' your father ye are. Why, I'd know your skin on a bush. Come in, man, come in. Frank, me son, come up here till I get a good look at ye."

Hat in hand, Frank went along the hall and up into a little room. There was one small window. The floor was of clay; the ceiling low, and covered, like the walls, with a cheap pink and white paper. Strips of carpet lay near the door and on either side of a round table. On the walls hung photographs, almanacs, samplers, an old-fashioned engraving or two. In a corner stood a glass-fronted press holding a motley array of china and glass. A sofa stood against the wall, swathed, like the painted chairs, in bright woolen antimacassars. On the table were a few books; the Bible, the "Pilgrim's Progress," and Pope among them; in the middle stood an ornament in colored wax beneath a glass shade. On the mantelpiece were more photographs, an ancient clock, two brass candlesticks, and a few china vases filled with dried grasses. A poor little room it was; yet to Frank Barry's quick eye the sight of it was not displeasing. It was tidy, clean, not cheerless. The trace of a deft hand was over it. Quite too good, it seemed, for the requirements of John Butler and his slattern of a wife; too dainty and refined, Frank might say, just as the trim garden outside had seemed altogether too worthy a setting for the big ring of the desolate fields.

John lifted a chair, dabbed it down before the window; took Frank by the shoulder.

"Sit down, me son," he said; "sit ye down; Sarah, sit ye down. Heavenly hour, Frank, but I'm glad to see ye back. Sure Nan was tellin' us about ye. Haw, haw," he laughed and smacked his knee; "to think o' that fall ye had in the cot, an' her not to know ye till she nearly had ye ferried. Haw, haw! . . . And you're sure you're well? Good, sir, good; though faith you're as thin in the face as a goat fed on stubble. Divil cares if you're well. Man alive, but I'm glad to see ye. Get out the glasses, Sarah, an' the bottle; get them out till we—Now, whisht wi' ye, Frank Barry. Is it your father's son refuse a taste—him that was the best fellow an' the best companion in all Fermanagh? Arrah, whisht wi' ye."

It was a saying in Garvagh that John Butler could do nothing better than any man, and talk more than any five—including their wives. Indeed his capacity for speech was astonishing. His talk poured forth even as water pours from a spout. Neither chance of a word nor time for a thought did he give you; like a spring flood the words came down and swamped you. He was a big man, with a square, ruddy face; the mouth large and mobile, the chin weak and flabby. His eyes were bright and kindly, his nose large, his head crowned with a shock of brown hair.

"Aw, your father was a roarer," John went on, half-filling a tumbler with whisky; "the merriest blade God ever made. Aw, but the girls were mad for him. Ay, ay. Take that in your fist, Frank. Come; none o' your capers. D'ye hear me, I say? That's right. Well." John raised his hand. "Here's luck, Mr. Frank, an' may heaven be your home." He drank and handed his glass to Sarah. "Drink, Sarah," said he.

Mrs. Butler smirked at Frank, bobbed her head.

"Long life to ye, Mr. Barry," said she; then sipped, grimaced, and passed the tumbler back to John.

Frank looked from one to another.

"I look toward you," said he, "and drink your very good health." Slowly he raised his glass, sipped, spluttered; the stuff was sheer poison.

John gave a snort of disgust.

"Pah!" said he; "you're no Barry—no Barry at all. Why, man, your father would ha' finished what's there in once, an' shouted for more. You're not like him there, me son. But tell me, now, how d'ye take after him in regard to the women? Eh, ye dog ye?" And just there the door opened and in came Nan.

She was dressed simply in a gray dress, a bit of red ribbon showing at her throat, and her black hair falling loosely about her brow. Very charming she looked, thought Frank as he rose to greet her, very charming indeed.

"How do you do, Nan?" said he. "You see I've kept my promise."

She gave Frank her hand.

"You're welcome, Mr. Barry; very welcome," said she; then turned and took a chair beside her mother.

Frank had been sitting with his face to the window, having John on his right and Sarah on his left; now he shifted his seat and turned from John.

"Your father has been twitting me, Nan," said he, "upon my mishap in the cot the other day. You told tales, then?"

"Aw, yes," answered Nan with a smile, "sure ye weren't hurt."

"And that is why you told?"

"Aw, no; sure not at all."

"You wouldn't have told, then, supposing I had been hurt?"

"Eh? Why, of course. To be sure. Only not in the same way."

Frank laughed.

"I see," he said. "You got home safely, I hope?"

"Aw, yes," answered Nan; "aw, yes."

Somehow, Frank's stream of talk—usually so fluent when very small—would not run. Nan seemed shy, a little demure. Sarah, he felt, was watching him narrowly. John, he knew, was leaning forward, elbows on knees, hands clasped, his face big with the joviality bred of whisky. Quickly he turned.

"You remember my father well, Mr. Butler?"

John drained his glass, sat back in his chair.

"Knew your father? I knew him better than I know myself. I knew him when he was a babby; I knew him when he was that high—an' that—an' that. Sure, we went to school together. Sure, many's the fight we had. Sure, I mind me—"

John was fairly started; and for the next twenty minutes he sat there rolling out his reminiscences, the while Frank, giving him but half an ear, sat looking now at the geranium pots on the window shelf, now at Nan, now at Sarah, now at John, but most of all at Nan.

Nan was a charming girl, Frank thought; but how strange that she should be the daughter of such parents, particularly of such a mother. John, that big, good-natured John, might pass; but the slattern of a mother! No, Nan was not in the least like her mother; for that let the gods be thanked. Was she like John, then? Yes, somewhat; but, taken all in all, she was just herself, just plain Nan. He liked the girl. A very different Nan she looked from the Nan of the old jacket and peaked cap who had ferried him but a few days ago. How was it? Could it be that, knowing he had come, she had adorned herself? Ah! And now he knew another thing. It was she who had arranged that little parlor, who had given to its homeliness that indescribable air of femininity, of taste; it was Nan's room, not Sarah's or John's; just as the garden outside doubtless was hers also. He glanced at her. With downcast eyes, she sat by her mother twisting a ring round the third finger of her left hand. So! Frank turned quickly away; and the next minute John rose.

"Ay," said John, "that's just how it was. That's the very way the girl came to capture him; an' that's the very way he left these parts and went off on his travels to Dublin. But sure ye know; an' now come away out, Frank, till I show ye the fields.

Get the tay, Sarah; an' call us when it's ready."

Frank followed John through the garden, out into the lane, and thence uphill till they came to a mound toward which from all sides the island sloped up from the water. Standing there, Frank had full sight of all Inishrath, and of the lake stretching away from its stony shores. In shape it was nearly circular. Round its edge, here and there, were trees. Hedges ran down and across it, and from ditch to ditch lay the bare ribs of the little fields. The soil showed cold and hungry through its covering of stones and coarse grass. Here two goats were hobbling along, there a donkey stood forlorn among the whins, in and out of the rush clumps ran scrags of fowls. Half way down stood the Butlers' home—tumble-down offices behind, garden in front, the pier and cots below. The wind came shrill and keen; the sky hung low; bleak and barren, Inishrath lay scowling in the waste of gray waters.

John stretched an arm and swept it around.

"There," said he; "there's me estate."

Frank looked right and left, here and there. Yes, thought he; and an estate to be proud of.

"The whole island, then, belongs to you, John?"

"Such as it is, I own it all—for a consideration in the shape of rent," added John with a grin.

Frank nodded.

"And yours is the only house upon it, I see?"

"That's all. One house an' one estate, an' all me own."

Again Frank nodded.

"Many a king owns no more."

"Ay, faith," answered John with a laugh. "An' a good many of them, stretched their full six feet, own a trifle less. Ay, indeed. Och, an' it's the mighty grand king meself is, wi' me two-story castle down there, an' one ass for a subject, an' me fleet lyin' there below. Sure, like the lad in the song,

> "From the center all round to the say,
> I am lord of the fowl and the brute."

"Yes," said Frank with a laugh. "So you are. And you never feel lonely?"

"Aw, no," answered John; "aw, no. People come over kaleyin' o' nights; an' sure, always we're seein' people at the ferryin'. Ay, we are. An' aren't there four of us, anyway, always round the hearth to keep each other company; an' isn't Ted Ross wi' us that constant ye might call him one of ourselves? Aw, no; loneliness niver troubles us; divil a bit does it."

Frank looked at John.

"You said four, I think. What four, pray?"

"What's that?" came back. "What four, ye ask? Isn't there Sarah, sure that's one. An' isn't there Nan, sure that's two. An' isn't there meself, sure that's three. An' isn't there the ould father, God help him; sure I'd be thinkin' that's nearly four."

"Ah, I see. And who may Ted Ross be?" Frank asked.

"Aw, just a lump of a chap from over the lake that's sweet on Nan."

"Ah." Frank looked away. "Indeed! You'll miss Nan," he went on, in a while, "when Mr. Ross takes her from you?"

John laughed.

"Aw, we will, we will," he said, and fell to rubbing his chin. "But time enough sure to miss her when she goes. It might be long enough before that; sure it might. One niver knows. Maybe she'd niver go. Who knows? Ted's in no hurry; an' Nan's in no hurry; an' we're not. So there ye are, faith; there ye are."

Somehow, Frank's face brightened at the words. Gladly he turned again to John; presently fashioned a remark which set John's tongue wagging in a long account of himself and of his many adventures in the welter of things. His father and grandfather had held Inishrath before him. All his life had John lived there. He liked the place and was well content; though sometimes he had a notion how poor a thing it was for mortal man to live and die and never get a squint at the wonders of the big world. But, aw, sirs, landlords were the tyrants. Twenty pounds a year he paid in rent; and that for land that couldn't

feed goats. Long ago he had quit trying to cultivate it. Now he just let it go to the devil, and trusted to God and the ferry-money for the rent and the bit to eat. Let Frank look at the land; let him drive his heel into the clay.

"And yet," cried John, wheeling round and spreading his arms, "twice has the landlord served me with a notice because I got into arrears. Twice, I say. What d'ye think of that, Frank Barry?"

Again Frank looked round the fields. Suppose old Hugh lord of that island? thought he. Would its fences then lie broken, its ribs stretch nakedly from ditch to ditch; would only two goats, an ass, and a tribe of fowls be abroad upon it; would old Hugh be standing there with his hands in his pockets, giving voluble proof of his own incompetence?

"I think, John," said he turning, "that in some ways you're a very lucky man, and in some very unlucky." And, quick on his words, Nan's voice came shrilling up from the garden calling them to tea.

The two left the wind-swept rath and went down through the fields; and at the garden gate Frank halted. He would be for home now, he thought. It was getting late; his uncle expected him. John took him by the arm, pulled him across the garden, and shot him through the doorway.

"Uncle be hanged!" shouted he. "In ye go, Frank Barry. It's not yourself 'll be the first man to leave Inishrath wi' an empty belly. In ye go; straight into the parlor. There, now you're safe, me son," quoth John, and closed the door. "Tryin' to give us the slip, indeed!" John sprawled into a chair and put his hat beneath it. "Wantin' to run off to your uncle, indeed! Yes, that's what he was after, Nan."

Nan put down the teapot.

"Aw, sure ye wouldn't treat us like that, Mr. Frank," said she. "Sure ye wouldn't."

"I'm truly sorry, Nan," answered Frank. "I'll never be guilty again. John, you'll forgive me—and you, Mrs. Butler?" he added, with a look across the table at his hostess, sitting there in her Sunday gown, smirking and playing gentility.

"Aw, to be sure, Mr. Barry," answered Sarah. "To be sure."

"Aw, blood an' ouns, of course," roared John; "of course. Sure, I knew ye meant nothin'. An' now what'll ye have, Frank, me son? There's hot sody cake, an' white bread, an' pritta bread, an'—Aw, hang it, Frank, don't let us be doin' the polite. Just pull up an' help yourself."

So Frank pulled up and helped himself; and the cups rattled on the saucers, and the spoons clinked merrily, and John talked and talked, and Sarah minced and watched, and Nan glanced at Frank, and Frank admired Nan; and, suddenly, across the waters came a cry from the Lismahee side, a long, shrill "Aho-y-y."

"The boys from the market," said John, diving for his hat. "Faith, it's early they'll be. Come, Nan, me girl; come away, Sarah. Ye'll forgive us runnin' off, Frank, me son? But the poor must earn their bread be the sweat o' their brow. Ay, ay."

So the feast broke up. All hurried down to the pier; there manned the big ferry cot and, Nan and Frank at one oar, Sarah at the other, John standing by the steering sweep, set her course for the Lismahee side. The night began to fall; the waters lapped against the cot and splashed musically at dip of the oars; but, all the way from Inishrath to the Lismahee side and thence (the cot now full of noisy marketers, some tipsy, some sober, many striking the golden mean) to Garvagh, the only music that sounded for Frank Barry was the soft witchery of Nan's voice, and the only night that fell flashed from Nan's dark eyes; nor did he once call to mind the eyes and voice of his dear Maid Marian. Ah, Frank Barry!

Then the cot swung to the pier; out poured the marketers with shout and clamor. Soon Frank was standing in shade of the willows, and Nan was gone, and John's voice was ringing out across the dark waters: "Good-night, Mr. Frank. Safe home; an' come again soon."

CHAPTER V.

Two nights went; it was only the afternoon of Monday, yet once again was Frank

Barry feeling somewhat restive. He felt inclined to mope, to grumble. The days were long, the nights weary; life, he felt, ran tamely within the precincts of Ryfield. It seemed quite a week, for instance, since Saturday and his visit to Inishrath; it seemed eighteen hours rather than eight since the coming of Marian's letter by that morning's post.

How was it? Was his environment to be blamed; that, or himself? His environment surely. Think of the last two days. Think of Sunday; its late breakfast, its weary drive through the fields and bogs to the dreary church with its box-pews, harmonium, drawling choir, prosy sermon. Think of the long drive back to a cold dinner, a puritanical somnolence, a profitless smoke; of that farmhouse parlor at night, stuffy, crowded with rustics, Moody and Sankey with accompaniments by Miss Clodhopper on a battered piano, long prayers, thunderings, sighs; think of the walk home through the rain, the supper of porridge and milk, the long chapter and longer exposition, the early bed; think of it all! And what of better, so far, had that day brought? None. All the morning he had walked with Hugh about the fields; all the afternoon had been writing to Marian; now his uncle had gone to Bunn, Sally was busy, he had nothing to do. "Oh, confound the place!" cried Frank. "What the dickens. . . ." Words were useless. He had tea; put on hat and coat, went out.

He struck the broad road; without hesitation turned his face from the ferry. No more Inishrath and tempting black eyes for him yet a while. Straight on he walked, past bogs, hills, cottages, cabins. Away in front stood the long mountain; on either hand stretched the everlasting hedges; above was a low gray sky. He met not a soul, heard scarcely a sound; within twenty minutes was back again at Ryfield gate, lighting a fresh pipe and taking his mental bearings. Should he spend the evening chatting with Sally, reading his Shakespeare, making notes for this would-be novel? Or should he retrace his steps and walk till he met old Hugh? Or should he, should he—?

Frank shrugged his shoulders; slowly began walking toward the lake. The trees would be company, he reflected; the wind, the lap of the waves. He came to the shore. Desolate it was, and somber as ever. Still, he had counted on that; for him gloom held a certain poetic charm. Gathering his coat about him he sat down on the edge of the pier; idly began juggling with phrase and fancy. How weirdly silent the world was. How far away, even, sounded the lap of the waves there at his feet. What a melancholy, so profound, so mysterious, lay at the heart of nature in these heralding days of sweet springtime; ah, what joyousness, awakening was in store! How low and dismal the sky hung; how passive were the treacherous waters out there; how stealthily drear night came creeping. There! He liked to see that light spring out so suddenly. It was—yes, it was in Inishrath, in the Butlers' cottage. Perhaps Nan had kindled it. Hark! The steady beat of oars came sounding along the shore. Who could it be? Frank mounted the pier, walked to the water's edge, peered through the twilight. A cot came in sight; came nearer, nearer. Bah! The rower was a man! He turned away, swore; turned again.

"Hello, there," came across the water.

"Hello," answered Frank.

"Are ye for over?"

"No. . . . Stay. For where bound?"

"Inishrath."

"So?" Frank considered. Should he? Should he not? He raised his head. "Well, I'm for there too," he shouted, "if you don't mind taking me."

"An' why not?" came back; within a minute Frank was in the cot and once more adventuring upon the deeps. Few words passed all the way over. It had fallen dark. The oars clanked loudly. Frank sat pondering. The stranger was smoking. They landed; pulled the cot high and dry upon the shore; together set off up the lane.

"You're strange these parts?" said the man presently.

"I am," answered Frank; "very strange."

"My name's Ross, if ye'd like to know,"

said the man, just as they came to the garden hedge. "Ted Ross, they christened me."

Frank paused.

"Oh," said he; then, after a step or two, "I've heard your name before, I think."

"Ay, mebbe ye have," came back. "An' I'm thinkin' I saw yourself at preachin' last night. It's Mr. Barry, isn't it?"

"Yes."

"Ay. Well, there's your way," said Mr. Ross, with a nod at the garden gate. "I'm for the back door."

"And I'm with you," said Frank; so, passed through a gateway, crossed a yard, and at Ted's heels went straight into the Butlers' kitchen.

A large room it was, floored with cement and lighted by a tin lamp that hung in the chimney nook. The walls were smoke-stained, the ceiling sooty-black. From the joists hung clusters of onions, strings of smoked bream, bacon, bladders, dried herbs; a gun rested above the fireplace; on the walls were tins, nets, hay-twisters, harness; the dresser shone like the windows of a china shop; in the corners stood oars, poles, bundles of osiers, lengths of split wood.

John Butler, seated with his back to the chimney-jamb, was making a basket; Sarah his wife, arms bare and skirt bunched about her waist, was stirring green-stuff into a pot that bubbled over the fire; in the corner farthest from the door sat an old man in a high-backed chair.

"God save all here," said Ted Ross, making for a stool.

"Save ye kindly," answered John, looking up. "Bully, Ted—Eh? What!" John rose. "Why, it's Frank Barry; hang me, if it isn't. How did ye come? How the divil are ye, Frank? Man alive! Thunder an' turf! An' to come to the kitchen! Ted, ye divil, what in glory made ye bring Mr. Barry to the back dure?"

"His own feet brought him," answered Ted from his place by the hearth. "His own feet an' his own free will. Where's Nan?" he asked of Sarah, who, whilst John was questioning, deftly had been smoothing her hair, ordering her skirt, wiping her face with a corner of her apron.

"Milkin'," answered Sarah; then turned to Frank. "Good-evenin', Mr. Barry," said she.

"Good-evening, Mrs. Butler. I hope I see you well, ma'am."

"Aw, yis," said Sarah; "aw, yis. But ye'll be comin' up to the room above, Mr. Barry. Sure this is no place for ye at all; sure it's all of a muck."

Frank dragged a chair toward the hearth.

"It's the place I like," said he. "With your permission, ma'am, I'll share your hearthstone for a while."

Mumbling her excuses, Sarah backed toward the dresser; but John gripped Frank's shoulder.

"Well said," said he; "well said, me son. Down ye sit, an' may the fire never shine on a worse man, say I. Sit ye down."

Frank threw off his coat, laid it on the table, sat down. On his right was the old man. On his left Ted Ross sat hunched on a stool. Sarah lifted the pot from the crook, carried and set it in the middle of the floor. A fine flavor of boiled kale and a sudden burst of steam went up to the rafters. John flung his basket below the table, turned to the fire, and dragged forward his stool.

"That's the ould man," said he, looking at Frank and waving his hand across the hearth. "Father," he roared, "I say, father. Here's Mr. Barry all the way from London come over to see us."

"Ay, ay," said old John, and gave Frank a moment's look at his wizened face, all yellow and puckered, set with weary, lackluster eyes, crowned with a shock of snowy hair.

"A powerful age he is," whispered John to Frank; "an ojus age. He knows nothin' or nobody. He's just alive, God help him. Ye know Ted Ross?" he said aloud, with a jerk of his thumb.

"Yes," said Frank. "We made each other's acquaintance a while ago."

Ted grunted assent. John rubbed his hands together, spread them to the blaze; began to talk. Powerful late the spring

was in showing its nose; terrible hard it was on people to get never a chance to cut a turf; shocking hard it would be to get the next half year's rent together. Ay, ay. Sure the country was gone to the dogs. Sure the blaggards of landlords were ruining everything.

A step sounded in the yard, the latch rattled, and in came Nan. John ceased talking; Sarah, still occupied with the contents of the pot, coughed warningly; Ted sat stolidly on, pipe in mouth and his face to the fire. Frank rose.

"How d'you do, Nan?" he said. "Here I am again, you see."

Nan stood her milking porringer on the table; came forward and gave Frank her hand.

"You're kindly welcome, Mr. Barry," said she; then pulled a stool from beneath the table, set it between Ted and her father, and sat down. Ted took his pipe from his mouth.

"Bully, Nan," said he, and went on smoking.

"Well, Ted," answered Nan; then folded her hands and fixed her eyes on the fire.

John went on with his rigmarole. Frank leaned back in his chair, hooked his thumbs in the armholes of his waistcoat; with the tail of his eye fell to observing the methods of rustic lovers. Close together, almost elbow to elbow, they sat; yet of each other's presence seemed to take no heed. As wooden as a graven image, Ted sat sucking at his pipe. Like patience on a monument (the simile is Frank's own), Nan sat staring at the pothooks. Surely they must have quarreled, thought Frank. Surely this Ross was a very boor. He took good stock of him. A muscular young fellow he seemed; broad of shoulder, thick of neck, big of limb. His face was strong and well molded; his brown hair curled closely; his skin shone healthily. He was dressed in rough tweed, leggings, a peaked cap, and hob-nailed boots. No Adonis, thought Frank, decidedly no gentleman; still, and Frank glanced at Nan, no denying that physically they were a well-matched pair. But was the man wooden, thought Frank; and, even as the thought came, Ted turned to his sweetheart.

"Ye weren't at preachin' last night?"

"No."

"An' why not?"

"I couldn't get away."

"H'm." With a grunt, Ted faced the fire again.

Frank raised his brows, smiled to himself; then stretched his legs toward the blaze and gave full ear to John's discourse.

Hitherto John had been talking disjointedly, half-heartedly; now, at sight of Frank giving him full heed, quickly he found himself, stretched forth a hand, and gave his tongue the reins.

The subject was Ireland (that everlasting subject) and the land question (that eternal question); vehemently John grappled with it. Aw, he knew a thing or two. Hadn't he eyes? What were politicians but a tribe of bagpipes? What was government but an old woman? What was Ireland but a home of lost causes? and John rolled the phrase, picked, doubtless, in some chance garden of editorial wisdom, about his tongue. What were its people but beggars, outcasts, hewers of wood, and drawers of water? Who would save Ireland, sir? shouted John, shooting forth a finger. Would England, sir? Would politicians, sir? Would God save Ireland? shouted John again. No, sir. But this is what would save her, and John's voice sank solemnly: Herself, sir, and her own true sons.

Frank sat listening to this, and to ever so much more, with enjoyment. It was all so novel, so whimsical. The scene, the moment, appealed to him. He liked this windbag of a John, liked to watch his moon-red face, his flaming eyes, darting hands; liked to hear his voice, so mellow and big and richly twanged with the lough-side brogue. And, besides this or that, whatever else John could not do, talk he could, and well.

John Butler was a man of small education, and his powers of brain and mind were not great; but he had read a few books, was a close student of the newspapers, and whatever he read he remembered. He

could quote you leading articles, Latin quotations and all, by the yard. He could recite whole pages from Bunyan, and long chapters from the Book of Proverbs or the Lamentations of Jeremiah. Constantly in his discourse was some chance line, garnered in heaven knows what corner of the mighty press, of the poets in evidence. He knew much of Pope by heart. If, by any hap, he went to church, he would reel you out the sermon all the way home, mangling its style and theology out of all knowing. And nowhere did he shine more gloriously than by his own fireside; there, with his old father blankly eyeing him across the hearth, with Sarah his wife facing him, hands spread on her knees, back as straight as any ramrod, eyes and face very signals of attention, with Ted and Nan sitting mum at his elbow, and some chance visitor in the post of honor before the fire. At these times John was great; but set a man such as Frank—a scholar, a Londoner, and a Barry—in sight of the pothooks, and John was mighty. He quoted, ranted, banged his knees, whacked his fists, tore this poor Irish question into quivering shreds: *whew-w*, you might have thought him some impassioned patriot lunging it from Tara's hill. And Frank, lounging in the chair of honor, now glancing at Nan, now at Sarah, sometimes flinging an encouraging word into the bonfire of John's eloquence, enjoyed it all vastly; vowed to himself that the thing was worth all the screeds of Hyde Park or the thunderings of Peckham Rye.

Presently John's tongue slackened somewhat; and in the lull that came Frank heard Nan laugh softly. He looked: there were our sweethearts with their heads together. Ted had twisted round on his stool, and, cheek on hand, was whispering; Nan, hands crossed on her lap and her eyes lowered, was listening. Her lips were slightly parted; there was a smile on her face; and at sight of her Frank frowned.

John's voice died out. Softly came the whispering.

"Sure, I waited and waited for ye outside, an' ye niver came. Och, I niver heard one word the preacher said for thinkin' of ye."

"Did ye, Ted? Did ye?"

"Och, ye might have managed to come. Sure, powerful lonely I was all the way home."

"Whisht, Ted, whisht"; and at the word, Ted, suddenly aware that silence had fallen upon the kitchen, rushed round on his stool, glared at Frank; then leaned toward the fire to light his pipe. Steadily Frank kept his eyes on Nan's face. How well that blush became her! What brows she had, what lips, what hair! Nan looked up, glanced at Frank, flushed crimson, and dropped her eyes again. Ah, what eyes, what eyes!

John smoked for a while; rested elbows on knees, clasped his hands, turned once more toward Frank.

"You'd be thinkin' a power, Frank, o' the poetry o' Pope, I'm thinkin'?" said he, cocking his head.

"No, John; as poetry I think but little of it."

"Ay? Just so. An' why, may I ask?"

Oh, Frank had many reasons for his opinion: was John very anxious to hear them? Yes; John was bursting with anxiety. Well, then. . . . and Frank went on to state his case. John listened attentively, contenting himself with an occasional snort of dissent or a wondering click of the tongue; listened attentively till Frank had finished, then smacked his lips and turned to the fire.

Aw, yes. Frank spoke like a newspaper, so he did. Pope didn't write poetry, said Frank, he was only a kind of pastry cook that baked cakes of prose and put a crust of rime on top. That was how Frank talked. Yes.

"But mebbe ye'd tell me," quoth John, glancing sideways at Frank, "what ye might call this prose?"

Frank defined prose.

"An' what might ye call poetry?" asked John, with a knowing look in his eye.

Frank gave a definition of poetry.

"Ay," said John. "I know. Well, there's a newspaper over there. D'ye call that poetry?"

Of course Frank did not.

"Well, in the top corner of that newspaper," John went on, "ye'll find somethin'

headed, 'An Ode to Spring.' It goes like this"; and, whacking his hands together in pace with the rhythm, John quoted a verse or two of hillside doggerel. "D'ye call that prose, now?"

Of course Frank did not.

"Isn't poetry, then?" John's voice rang in a shout of victory. "Aw, whisht wi' ye," cried he, and turned from the sound of Frank's explanation. "If it isn't one, it must be t'other. An' can't any fool see it is? Doesn't it go *jog along, jog along, jog along*, wi' a lilt an' a swing to it? . . . Aw, shame on ye, Frank Barry. Man alive, if that's all ye learnt in London, you'd ha' been better employed fishin' for eels in the lake below. Tut, tut! Man, dear, a little learnin's a dangerous thing. I tell ye, sir, Pope's a rattler. Compare him wi' Tommy Moore, or Bobby Burns—"

"Or Willy Shakespeare," interposed Frank, with a scorn that was withering.

"Ay, or Willy Shakespeare," roared John. "Hang it, d'ye think that hurts Pope? No, sir. Tell me, did ye iver read 'The Essay on Man'? Ye did. An' ye didn't like it? Holy fly! Why, man, it's wonderful to the world. Listen to this (John quoted thunderingly); an' this (John spouted interminably); an' this. . . ."

Frank sheathed sword. As well try to breast Niagara, he felt, as bear up against the torrent of John's bluster; as well try to whistle down a thunder-storm as endeavor a word between the onset of his sentences. What a fool he had been. He had attempted to lighten the noisome wastes of rustic ignorance, had hoped to shine a little in John's eyes—and in Nan's—and now! Oh, confound Pope; and confound John Butler. Let the blockhead thunder away.

So John thundered away; passed presently from his eulogium of Pope to a disquisition on religion, and therein found such disport that Frank, in his discredited seat of honor, was forced to silent contemplation of one or another in that little semicircle gathered there before the fire.

In his armchair, old John was asleep, chin on breast and his lips dribbling. Low on a stool, Sarah sat rounding the heel of a gaudy red and blue sock, her eyes fast on John's face, her lips moving in count with the loops that slipped from her fingers. On his left, now moved a little farther back from the hearth, the lovers sat whispering and bobbing heads. What were they saying? Frank wondered. What of pretty, or of amorous even, could a lout like Ted Ross find wherewith to witch Nan's little ear? Suppose he, Frank Barry, in Ted's place, would he be able to say aught that Ted had never said, bring from Nan smiles that Ted had never seen, see something shining in her eyes that Ted might never see? He wondered. Were they really in love? How came it that Nan was not wearing her ring? Ah, he liked Nan's face. And to think that her beauty, her worth, were all for the keeping, sooner or later, of a bumpkin! It was woful, thought Frank; then writhed on his chair and set it creaking; and at the sound Nan looked up, caught his eye, blushed, looked down, and nudged her sweetheart. With a clatter of his stool and a muttered oath round swung Ted; and Frank turning, found John's face, as round and rosy as a harvest-moon, turned full upon him. His eyes were twinkling; knowingly he winked at Frank, laughed and jerked his thumb toward the lovers.

"They make a purty pair?" said he. "Eh, Frank?"

Nan blushed deeper. Ted scowled. Frank grinned.

"I seen ye watchin' them," John went on. "Aw, ye rascal ye. Just in time I was to catch ye."

"Ach, keep quiet, can't ye?" growled Ted. "Why can't ye keep on wi' your blarney an' leave people alone?"

"Ay, and leave you to yours, Ted," answered John with a laugh. "Ay, ay. Love an' blarney, love that makes the world go round, an' blarney that keeps it goin'. Ay, ay. Well, fire away, me son, fire away. Ye won't be young always, me boy, an' once the soother in' days are over, they're over for always. That's right, Frank, isn't it? That's your opinion?"

"Something like that, John."

"Aw, yis." John sighed. "Somethin'

like that. Sure it's not so long since meself an' Sarah over there were blarneyin' too. Aw, yis. Ye mind that time, Sarah?"

Sarah bent her head over her knitting; across her face stole the shadow of a blush.

"Aw, sure," she said. "Aw, sure."

"An' the divil's own blarneyer meself was, wasn't I, Sarah? Always talkin' as big as the moon an' as bright? Eh, Sally?"

"Aw, 'deed ay," sighed Sarah. "'Deed ay."

"Aw, but sure it never hurt us," John went on; "divil a hurt. All the better we were for our romancin', an' if we're wiser now, what are we the better? Sorrow a bit. Sure it's well to be young; ay, it is."

"Ay, it is," echoed Sarah.

"Come Christmas time," mused John, "I'll be fifty. Yis. Fifty years? It's a big age. Ay. An' all that time here I've been harbored, here in these four walls. There's been trouble sometimes, an' worry, an' heart-break. But, after all, things haven't been so bad, Sally? Eh, Sally?"

"Aw, no, John; aw, no."

"Fifty years? I wonder who'll be sittin' here come fifty more? Ay, ay. I wonder if it's God's will we'd be sittin' here this time next year. D'ye think, Frank Barry," said he, with unusual solemnity, "that if so be we were iver turned out of Inishrath—?"

"Nobody but yourself 'll iver turn ye out of Inishrath," said Ted Ross.

"Aw, whisht," pleaded Nan, laying her hand on Ted's arm; "whisht, Ted."

"I'm obliged to ye, Ted," said John, in his suavest voice; "I'm obliged to ye. All the same I'm free, I'm thinkin', to ask Mr. Frank there, whether, supposin' it's God's will—"

"God's will!" snapped Ted; and again Nan pleaded him to whisht.

"—Supposin' it's God's will we'd iver be turned out of Inishrath, he thinks there's work waitin' for the likes of us over in big London?"

"There's too much waitin' for ye here," shouted Ted; and once more Nan whispered: "Och, whisht, Ted; whisht."

"Ye'll answer me, Mr. Frank?" asked John.

"Don't answer him, Mr. Barry," said Ted.

John swung round on his stool.

"Who's master in this house, Ted Ross?" shouted he. "You or me?"

"You are, John Butler," answered Ted, "an' a danged bad master ye make, let me tell ye. You an' your foolery! You an' your talk about bein' turned out of Inishrath! I tell ye again, nothin'll iver turn ye out but your own danged laziness. An' I tell ye again, for the hundredth time I tell it to ye, that it'd be better for ye to die in the workhouse than be turned loose in London, or any other wilderness of a city. Isn't that true, Mr. Barry?" said Ted, turning to Frank. "Isn't true?"

Then Nan rose.

"I think, mother," said she, "it's about time we were gettin' supper. Come, an' I'll be helpin' ye.

(To be continued.)

IRRITABILITY AND MOVEMENT.

BY WILHELM HAACKE.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE GERMAN "UEBER LAND UND MEER."

IF on a warm summer evening we sit in the arbor by the light of a lamp or in a room with the window open, we will see not merely beetles, but many other insects, especially gnats and moths, dancing about the lamp and flame, the shade and chimney, and sooner or later falling with singed wings on the lamp and table. An irresistible impulse must drive the unfortunate creatures to the light. Not only are beetles led by such an impulse, but many thousands of birds are annually sacrificed to it, migratory birds, which, on their nightly journey to the winter feeding

ground or to the brooding place, have lost their way in the mist and have come too near a lighthouse. They strike against the brightly lighted panes, whereat many of them meet death. Trap-like lanterns render good service to horticulturists, and recently some one has managed to procure fish and other water animals by means of an electric light which shines forth from a trap-like apparatus lowered into the water.

The power which light exerts on many animals may be often fatal to them; the broad diffusion of the light movement, as we will call the characteristic which makes animals follow this power, has also led the ignorant to the supposition that it is generally advantageous, that it is one of the countless practical properties which make an organism an organism. And so it is; light instinct and light aversion cause organisms to seek beneficial influences and avoid the hurtful ones. They answer to those appulses which belong to the line of the so-called irritations, that is, to such incitements or irritations working on the organism from without as have a definite source, come from a definite direction, and irritate the organism, or a part of it, to motion or to growth in a definite direction. The tendency to turn toward an object and the impulse to flee from it play an extraordinarily great rôle in life and in the development of all animals and plants. Therefore it is proper to take a glance at the important phenomena of irritability and movement.

Among all the irritabilities and all the instincts, light irritability and light instinct play the most extensive rôle. The tendency to turn toward the light and the impulse to turn away from it are found among plants as well as animals. Heliotrope is a well-known and very fragrant decorative plant, but every flower-stand brings before the eyes the helio or phototropism of the plants, that is, their tendency to turn toward the sun or toward the light. One takes into consideration only the growing parts of the house plants, how they all reach out toward the light falling through the window, and their leaves know how to so turn and so twist that their broad surfaces remain at right angles with the source of light. Then the beams of light are really more beneficial, and the green in the leaves, that is, the chlorophyl, needs the light in order to change the inorganic nutrition into the organic building material on which they live. The light instinct of the plant is also one of its especially useful characteristics. Positive phototropism, the tendency to turn toward the light, belongs only to growing plants and not even to all vegetable organisms. The matured stem no longer exhibits the tendency to turn toward the light, and some of the organs of many plants are distinguished in their growth not by turning toward the light, that is, positive phototropism, but by negative, that is, turning away from the light. The embryonic plant of the white mustard, cultivated in a transparent solution instead of in the soil and placed in a pot whose interior is lighted only by an opening broken in its side, turns its growing roots away from the light. Besides this negative and positive phototropism of growing plant stems, a transverse photo or heliotropism has been spoken of. This is ascribed to the leaves which place their broad surfaces at right angles or diagonal to the beams of light. However, this transverse phototropism is in reality only a variety of the positive, for it is a question not about something midway between the tendency to turn toward the light and a tendency to turn from it, but about the strongest light attraction, the highest degree of light irritability.

Microscopic plants and the multitude of spores of others likewise invisible to the naked eye, also the reproductive bodies of plants, can move about freely. The movement toward the light or away from it occurs among them, so one speaks not of phototropism, but of phototaxis. Phototaxis is the phototropism of freely moving, living forms; is their tendency to turn to the light and from it. It is found among the algæ and other lower plants, but especially is it noticed among the animals. Animals having the light instinct are divided

into friends of the light and enemies of the light. One of those inimical to light is the proteus, a well-known, salamander-like amphibian of Adelsberg Grotto and other dark holes of the vicinity, whose subterranean waters it inhabits. If it should venture into the open air it would be injured on account of its clear color, and so easily fall a sacrifice to amphibian eaters. But the proteus avoids the light; flees from it whenever and wherever it strikes him. One can easily observe this tendency in the captured proteus, which always seeks the darkest corner of its aquarium.

Experiments with the earthworm have proved that they also have a tendency to avoid the light, a fact well known especially to fishermen. They seek these little animals on the lawn, in pastures, and in gardens at night by lantern light, and they know that the earthworm must be taken unawares before it has time to escape into the soil. Earthworms which lie under stones vanish almost immediately into their holes if one turns up the stone and exposes the animal to daylight. The sun would dry it up, and in the bright light it is too easily perceptible to its enemies, the birds. Other dwellers of the earth are lovers of light, as the ants, among whom at least those who have reached maturity are light-seekers. The plant lice also seek the light. These, and especially the ants, are comparatively highly organized animals. We would expect to come across the tendency to turn toward the light among the lowest animals also if we take into consideration the same propensity in plants. So we find it in the green fresh-water polyp, which needs the light very much because it has made a kind of life partnership with a plant. Its green color does not really belong to it but to small living granules, one-celled microscopic algæ, which enjoy hospitality and nutrition in its mass of corpuscles and recompense its beneficence by the distribution of oxygen and the diffusion of air for breathing, so necessary to all animals. Then by means of the chlorophyl they separate the carbonic acid formed in the bodies of the polyp into carbon, which they appropriate to themselves, and oxygen, which they give up to their host. Therefore its chlorophyl needs the influence of light. The polyp must also seek this in case it is cast in the dark.

A very low animal, so lowly organized that it is considered by many as a plant, is the flower of tan which makes up each yellow bunch of slime living and crawling in and on the tan-beds. These bunches, which are composed of so-called protoplasm and conceal countless round microscopic forms enclosed in it, can move by means of slime processes the so-called slime feet which they can stretch out and draw back again. During the night they crawl out of the interior of the tan-bed, only to turn back again at the break of day. The sun would dry them up and they therefore have a tendency to flee away from the light. This is the case only with the young. The older flowers of tan surround themselves with an integument and separate within it into propagating corpuscles—the so-called spores—for which they need the dry air of the day, wherefore they seek the light. Parts of animals growing stationary, whether they have a tendency to turn toward the light or from it, behave similar to the parts of the stationary plants which have the same tendencies. We see this in certain plant-like animals of the sea, the polypides, which by the ignorant are considered plants, and they possess root-like creepers by which they are fastened to their base. These root-like creepers are in their relation to each other and to the whole body of the plant-like animal either light-seeking or light-fleeing, a condition which results in a necessary expansion of the root-like parts.

Heat ranks with light as a cause of irritability, and we speak of positive and negative thermotropism, of positive and negative thermotaxis. Growing stems of the maze plant, for example, have a tendency to turn toward the heat. The growing flax turns away from the heat, as do also the roots of the germ plants if the temperature which comes from the source of heat is too high. The bunches of slime of

the flower of tan also have a heat irritability; they turn toward the heat. This can be proven by a simple experiment: If water having a temperature of 7° C be connected with water of 30° C by means of a piece of blotting paper, the flower of tan placed on the paper will crawl toward the side from which the warm water comes.

Heat and light are related to electricity, and since we know that this can strongly influence organisms we need not be surprised that it also is a source of irritation. If a constant galvanic current be forced through water containing infusoria from the species Paramæcium, the little animals will collect about the negative pole. Some of the bacteria and other microscopic forms are attracted to the positive pole. Growing roots, on the other hand, avoid the galvanic current.

Of great importance is the irritation which gravitation arouses in plants and animals. The tendency to turn toward the earth and to turn away from it plays a great rôle in many organisms. We can best learn from the plants about the tendency to avoid the ground and to turn toward it. The tap-roots of germ plants are attracted toward the earth. For example, if the germ plant of a bean which has been taken from the earth is placed horizontally on moist soil in a pot darkened for the purpose of excluding the influence of the light and filled with aqueous vapor, then the point of the root would no longer grow in the direction of the root, but would bend and grow vertically toward the earth. On the other hand, the principal stem of the plant has a tendency to grow away from the earth. If a growing plant stalk is placed in a horizontal position, it will right itself, and that it does this as a result of irritation which gravitation produces has been proven by an ingenious experiment. The effect of the attractive force of the earth can be defeated by placing a growing plant into an apparatus, the movement of which constantly changes its position, whereby the force of gravity acts on it from various directions. Then the plant continues to grow in its original direction of development. The direction of the growth of the lateral roots of the plant is also influenced by gravity, but they do not grow like the tap-root, vertically in the earth, but they make with it a fixed angle. If a box in which the germ plant of the broad bean is growing should be so turned that the point of the tap-root is turned upward, then the lateral roots, which now point diagonally upward, will bend downward so that they will assume the original angle with the direction of the force of gravity. According to this it is evident that plants owe their outward form largely to the force of gravity.

Pressure also has a great influence on the outward forms of many parts of plants, and indeed of many entire plants. The tendrils, as we find them in vines and the pea plants, have a pressure irritability; if they touch a support they curve toward it, and the constant pressure causes the tendrils to wind about it.

There is yet much to be said about the irritability of plants and animals, but all locomotion of animals must finally be attributed to irritation. Many object to this, because, for example, the motion of the dog from place to place seems to be the result of the greatest free will, while we think that we observe the strictest conformity to law in the tendency of the lower organisms to turn from or toward the irritating sources. But one of the lowest forms, as the flower of tan, may many times have an opportunity to exhibit its power to alter its course. It has a tendency to turn toward water and to flee from cold. What shall it do, then, if in coming from a dry place it encounters ice-cold water. From this to the highest animals there is every possible gradation. The difference between the higher and the lower animals is only this, that the copious thought apparatus and the complicated brain formation of the higher animals give an opportunity for the simultaneous action of a whole series of irritations, and that these irritations must always, or at least often, struggle for temporary leadership, one only finally winning the upper hand.

THE PRESENT CONDITION OF FRANCE.

BY BISHOP H. W. WARREN, LL.D.

HOW one wishes to love La Belle France! I lately came off the monotony of the wide salt seas into the exquisiteness and witching beauty of Southern France. I had all the thrills and ecstasies of a lover. The play of color was entrancing, the liquid speech was melody; the clinging vines spoke only of affection; and the doves billed and cooed around a hundred dovecotes. I quite lost my heart that beautiful day to La Belle France. Though I knew she had the bright looks, witching airs, and languishments of a coquette I did not care to remember it. She has bright dashes of heroism and patriotism in her history, none brighter. She has dark tragedies in her blood, none darker. She gave a most strong hand of help to us in our colonial crisis, whether from love of liberty or hatred of her own inveterate foe we care not to inquire. We love her for it. But she gave us a deadly, mephitic disbelief in God and virtue afterward. The blight of her student and grisette life in the Latin Quarter is on some of our student life to-day. Her speech and pantomime are natural oratory. Bossuet and Bourdeloue are products to be expected. The *bon mots* are rivers of pearl and diamonds of language, but that language is salacious beyond belief. The spirit of liberty is represented as descending from the skies and alighting on the top of the Column of July. But the spirit of hell seethes up from below into a thousand dirty cellars and gorgeous saloons. France broke a thousand chains of oppression in its volcanic Revolution, but it gave to the world the guillotine and the Commune. The era of the revolution of pure good has not yet come. The bloody soil of war underlies the golden harvests of peace. Gethsemane yet lies at the foot of the Mount of Ascension.

When the first raptures subside we look about for the foundations on which ecstasies stand. What hintful good things, pregnant with future blessings, are in France to-day? Nearly thirty years of peace have passed since the awful scourging of the Franco-Prussian War. Let eyes of affection and hope see and tell what of to-day and to-morrow.

When the French peasants brought out their little hoards and paid the *milliards* of war indemnity to Germany they not only bought government bonds, but appreciation and respect. They were recognized as the strength of the nation, and Paris only the perfume and paper flowers. Since then much legislation has been in their interest rather than in the interest of their oppressors. The amount of legislation enacted for the good of the people in 1798 was stupendous, including provision for art schools, picture galleries, museums, experiment farms, and even the legislation of the superfluous *ê* out of the language. Even that great measuring of the earth, that no other nation has ever attempted, was set on foot and begun in the hottest and bloodiest times of the Revolution, but these beneficent measures for the people were not carried out so extensively until after the poorer people showed where the real strength of the nation lay. The third republic has provided that every little town of 5,000 inhabitants or over shall have its picture gallery, museum, and library of one book for each inhabitant. Many new pictures are bought every year in Paris for distribution to these rural places. In this way fresh beauty and attractiveness are attained.

The value of small savings was made so clear by the payment of these *milliards* that savings have been greatly encouraged by the government post-office savings banks. These were established in 1880, and in the first year one eighth of the entire population

were depositors. In the year 1890 there were 348,695 new depositors putting by for a rainy day $20,195,705. M. de Foville makes a graphic illustration of the deposits of the French people in ten years. The Eiffel Tower, he says, weighs about 150,000,000 pounds. Reconstructed of silver, it would need two stories added to represent these deposits in ten years. The amount is two *milliards* of francs, and the *milliard* is inconceivable by the human mind, that many minutes not having elapsed since the Christian era.

Of course a great amount of their savings is invested in the purchase of land, facilities for which are open to all. France has always been in advance of the purely feudal nations in this respect, but the tolls and wars have often rendered such a possession valueless or worse. As far back as the early crusades lords sold land to serfs to get means to equip themselves for the wars. Being taken prisoners, other lands were sold for ransoms. Before the Revolution one fourth of French soil belonged to peasants. In 1789 four million Frenchmen owned lands; now there are eight million landholders. One third of the waste or uncultivated land in France was redeemed to culture between 1844 and 1882.

In speaking of the improvement of human conditions the development of the school must be noted. The beginning, like nearly every good for France, was in the Revolution. Some of the best heads of the nation were falling by the thousand under a merciless knife in the Place de la Concord, but some of the seeds of greatest good were being forced into bloom, not fruit, by the strange fever-heat of the hour. The Convention decreed a lay, gratuitous, obligatory system of common school instruction. It failed of enforcement when the Convention failed of existence. The first educational law was made efficient in 1833. But so great was the work to be done that in 1872 two thirds of some departments could neither read nor write. But such better means have been adopted by the third republic that while in 1866 thirty-five per cent of the entire population were illiterate this pitiable class was reduced to nineteen per cent in 1882.

The greatest emancipation of France has been from the conventual schools for the children of unknown fathers. These institutions seem to have been contrived to get individuals to give a dozen years of service for a most beggarly support. The proceeds of this labor went to enrich the church. The girls were taught to sew for sewing's sake and were taught nothing else. After ruining their eyes they were turned out at twenty-one years of age with no preparation for the joys, duties, or responsibilities of life. M. Jules Simon showed in his work "L'Ouvrière" that of each hundred dozen shirts sold in Paris eighty dozen were made in the convent schools. This not only meant ruin for those in the schools, but, by reason of such competition, distress for all seamstresses outside.

Besides these schools for the poor there were convent schools for the rich, where the girls were taught embroidery and other fancy work, till old enough to be married by their parents to some one they had scarcely seen.

In 1884 the crisis hour for public schools came and the act of that year developed education and heightened its spirit as never before. The Lycée, a public school for girls, is provided for in the cities and larger towns by the acts of 1880 and 1882. The curriculum is rather moderate, but it embraces the French language, common law, and domestic economy, including the making of clothes. There is no religious test or teaching. The tuition is not high, $140 covering board and education for a year.

It is a singular fact that these girls are never for a moment free from espionage. Night and day they are under the strictest surveillance. This argues something very defective in the character of the girls, or boys, or possibly in the men who make the regulations. Still it is an improvement on the old system.

In consequence of these schools the French language begins to prevail in France. Previously it had been largely confined to Paris. Inhabitants of some

parts of France are unable now to understand the inhabitants of another part. Many Frenchmen cannot be addressed in French. The nation having been made up of a dozen fragments, some sunny and some saturnine, if not savage, and in the lack of liberal intercommunication, the various *patois* have not yet been merged into a common French. This is exactly what the common school is fitted to do.

It is doubtful if the business instinct and ability of women are so greatly developed anywhere else as in France. Certainly not elsewhere in Europe. They really keep the smaller hotels and shops, take produce to market, and are often the better half of a partnership. Probably the murderous wars that have so largely drafted the male population from home are somewhat responsible for this. But the vivacity, quick wit, and perception of the women rendered them apt pupils at first and able teachers afterward. Another reason for this business activity is the fact that the French bride almost always brings more or less capital as her marriage dower. It is often her own patient earning or saving. She cannot well be denied an active interest in the partnership.

Owing to the impossibility of doctors obtaining a living in the less densely settled parts of France the nuns were early educated, I should say installed, in the business of tooth-pulling, the art of physicing and midwifery. It is not strange that women are now quite prominent in medical practice.

It may seem strange to speak about the sobriety of women. But I am just come from London, where you may see women by the dozen in an hour in almost any dram-shop, and dozens dead drunk, sleeping off their stupor in the public parks. Montague Williams declares that "there is no mistake about the cause of nearly all the crime of the East End of London. The curse of all is drink, and I must say that the wives are often worse than the husbands." But people who have spent years in the busiest parts of Paris or the country declare that they have never seen a drunken woman.

Allusion to one of the greatest triumphs of science over natural evil must not be omitted. In the early sixties the vines, that great source of wealth in France, began to wither. In 1868 the pest was discovered and called "phylloxera." It was an almost invisible insect, propagating itself with appalling rapidity and spreading havoc irresistibly. France, that could once give a bottle of wine to every inhabitant of the globe, had to import wine for its own use. The loss soon reached a thousand million dollars. The silk-worm pest inflicted a similar loss about the same time. The genius of the famous Pasteur came into the battle. He observed that the vines on sandy soil and salt marshes were not affected, and that American vines were hardy enough to be exempt. The extirpation of the precious and beloved vines of sunny France and the planting of American vines were begun with such vigor that 300,000 hecateres, 742,200 acres, were replanted in a few years. Pasteur's remedy for rabies had very little value in comparison.

The common people are not only protected from the ravages formerly practiced by the military class, but French soldiers are not allowed to be in debt on pain of dismissal. They are much more rigidly required to attend to duties than previous to 1871, and they cannot billet themselves on the populace directly, or indirectly, by a system of credit that is never settled.

In speaking of the material welfare of France notice must be taken of the life, labors, and usefulness of an Englishman named Arthur Young, who may be termed the "apostle of the turnip." Such were the exactions and hardships that not only many patient people starved to death in France, but multitudes of cattle and sheep went sadly lowing and bleating over the desolate fields to their death. In one instance a flock of two thousand imported English sheep died for want of sufficient and suitable food. In consequence Arthur Young, a Suffolk county squire, consecrated himself to the missionary work of bringing salvation to these poor animals. A little more than a hundred years ago he traversed

France very widely, writing a journal full of shrewd observations and persuading the people to sow his turnip seed and the Manzel Wurzel grass, whereby he added millions to the productive value of French agriculture and comfort to millions of lives. If French beasts have a heaven hereafter Arthur Young should be the chief figure in their pantheon. How easily even a farmer's enthusiasm finds place in a world whose loftiest ideals are set to the keynote of sacrifice of self for others. Between the cup of cold water and the giving of the life of God there is room for the life work of every man.

Since 1871 France has made it obligatory upon every citizen to render three years' service in the army. It is a terrible tax. No payment of money can purchase exemption or substitute. Only the sick and deformed escape. And one is liable to be called upon at any time up to his forty-fifth year. To this awful tax there are very few exceptions, such as (*a*) teachers engaged to serve ten years, (*b*) students who have passed certain examinations, (*c*) students in theology preparing for the ministry, (*d*) a certain number of artisans. The student must give up his studies, the lover the prospect of marriage, the wife her husband, the business man his maturing plans. It is so unreasonable. Because of the schemes of ambitious rulers lands intersected by a narrow frith abhor each other, mountains interposed make enemies of nations. When will they learn war no more? The army is said to be under the power of the Catholic Church to an amazing degree. Men living that kind of life want instant absolution at hand. The courts are under the power of the army.

No one can think of France and her future without reckoning with the ultramontane papal church. Its iron hand in velvet glove has been on her throat since the massacre of St. Bartholomew's Day.

Concerning Protestantism one devoutly wishes more could be said. Still much can be said. Out of eighty-six departments, one, La Gard, has been thoroughly Protestant from time immemorial. There are whole villages where there is no Catholic church. The three senators representing La Gard in 1891 were all Protestants. When the bishop of Nimes died in 1889 a Protestant notary was appointed as trustee of his estate. The whole face of the country and the condition and ability of the people show that a higher life and range of thought has worked out its natural result.

Every one knows of the marvelous success of the McAll mission in a dozen cities, and that Père Hyacinth, an ex-priest, speaks to crowds weekly. We are not surprised to hear that the officers of a city ask the Protestant minister to expound the principles of his faith. Occasionally a whole commune, as Murat in October, 1891, accepts the services of the Protestant preacher. And the great newspaper of Paris, *Le Temps*, is thoroughly Protestant. Still we are obliged to confess that the Protestantism of France is too largely, as elsewhere, a question of organization and form, rather than of life. Could some Wesley do for France what was done for England and the rest of the world, the day of its emancipation would speedily dawn. This illumination would be far more difficult for France than for England. In the latter there was only the natural enmity of the human heart to overcome, and there was the power of conscience within to appeal to. In France there is the organized opposition of the Catholic Church and the conscience has both been corrupted and given over to the keeping of another. That this power will not fail to be exercised here as elsewhere is seen in the fact that when Dr. Gulpin opened a technical school in Nantes to teach girls the common arts of honest life, the pupils were threatened with the terror of punishments in this world and the world to come. South America is here. Spain, the Inquisition, and the massacre of St. Bartholomew are lacking only because the lovers of them do not dare.

About thirty years ago the freemasons determined to remove the symbol of the deity from the lodges of France. That, like the removal of the Bible from the altar of masonry in Peru, was held to be suicide.

The Grand Orient Lodge was at once disowned throughout the world. Making some alterations in their form of ritual and constitution the order went on, with what success I am not able to say. But a new Orient Lodge was formed which preserved the orthodox ideas of masonry, and it has been everywhere recognized as the only true representative of the order in the country. This fact is mentioned as one of the social factors in the future of the country wholly independent from any churchly influence. It is well known that the pope hates the masonic order, as the Psalmist says, "with a perfect hatred." It is fair to assume that the order cordially reciprocates the feeling.

In our looking with eyes of admiration at La Belle France we have mostly wandered in the leafy lanes of sweet country places on lovely moonlight evenings. The wish to love beautiful France is gratified. Such a lover can see Helen's beauty in a brow of Egypt. But when one comes to Paris, which, thank heaven, is not France, even the wish to love is taken away. Helen's brow and whole appearance is tricked out with the rouge and gauds of the public woman. I do not remember any heathen city where vice is so open and flamboyant. Four years ago it was prophesied by an eminent statistician that France would soon become a decadent nation, the deaths outnumbering the births. It has come to pass. It has come to such degradation as prefers the enervation of lust to the strength of fatherhood and motherhood. Refusing to obey God's first command to multiply, they come under nature's curse to dwindle and become extinct. Their fate is startlingly and graphically portrayed as by a handwriting on the wall by a picture called "The Decay of the Roman Empire." The canvas is huge and the figures very numerous. Every suggestion of wine and riotous living, of bastard loves and naked women, of seductive music and worse than wasted youth crowds nine tenths of the picture. In one corner stand single embodiments of the hardihood of the Roman soldier and the stoicism of the Roman philosopher. But the crowd of scented men and *blasé* women regard them not at all. They will regard nothing but Attila, "the Scourge of God," and his Goths and Huns. One hope remains, that into the Paris reality, as does not appear in the Roman picture, a preacher may come, some Jonah so crying aloud that he shall be heard.

THE SOCIALIST PROPAGANDA IN GERMANY.

BY EDGAR MILHAUD.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE FRENCH "LA REVUE DE PARIS."

THE Social Democracy is at present the strongest party in Germany. For thirty years its progress has been continuous. At the general elections to the Reichstag it obtained: in 1871, 124,655 votes; in 1881, 311,961; in 1890, 1,427,298; in 1893, 1,786,738, or nearly a quarter of the electors. These results are explained in part by the economic evolution of Germany since 1871, the prodigious development of manufactures, the movement toward concentration of capital, the periodical crises, and the increase of the unemployed. But it was necessary to awaken in the masses a consciousness of the economic facts from which they suffered: this was the task of the socialist agitators. It is by the organization of the party, by the sacrifices made for the propaganda, that they have so well succeeded.

At the head of the party is a committee of direction which holds its power from the general assembly and is charged with the conduct of affairs. Confidential men put this committee of direction in communication with the members in different localities. In each locality the men of military age are grouped into political circles, which have generally taken the form of electoral circles because these are the political societies

which have least to fear from the police. These circles direct the local political activity, arrange public meetings, and assure them a good attendance. The committee of direction assures the unity of action of the party, while the local and provincial organizations permit the form of agitation to be adapted to the special conditions of the different regions of the empire.

It is necessary in order that the work of propagating go on that the party assure certain men independence, free them from preoccupation with material life, and permit them to fear nothing from any patron. The Social Democracy in Germany has this power.

The German socialists have understood how to make their party a rich party. They have assured the material conditions of their agitation in organizing their finances. The members pay contributions, of which one part serves to cover local expenses, another part is consecrated to agitation in the province, and the rest is sent to the committee of direction. The receipts of the committee, which proceed also from the profits of the central journal, the *Vorwärts*, and from the book-store of the *Vorwärts*, amounted two years ago to $65,516, last year to $66,571. These sums permit the party to guarantee means of subsistence to those who work for it. On principle it pays all its officers, allowing those who have no need of their salaries, like the millionaire Singer, to renounce them. The presidents of the committee of direction receive about $12 per month, the cashier about $36, the secretaries about $60. As in Germany, the representatives do not receive an indemnity from the state, the Social Democracy gives its representatives $1.45 per day. Those who take a house in Berlin simply to carry out their official duties receive a supplement of $6 per month. Those who are in business are accorded a compensation of $1.50 or $2 per session. The editor-in-chief of the *Vorwärts* has a salary of $1,746. The writers of the party receive honoraries for their work. Public speakers are also paid. The propagandists sent into the country are given pay for their expenses and their time. Agitators whose presence is judged necessary are sent to certain localities. Funds are sent to the regions or provinces where the party is still feeble. Papers which are momentarily embarrassed receive subsidies. If a socialist paper has to furnish heavy bail, the party advances the sum. If a working man is discharged for his political activity, the party gives him aid. Sometimes it furnishes him the amount necessary to buy a small stock in trade, which will permit him to live while busying himself entirely with party affairs.

Aside from the officers of the party there is the *personnel* of the numerous socialist journals of the province; the *personnel* of the labor unions spreads over entire Germany. All these men are independent, or, rather, dependent only upon the working population, which gives them the means of living. They may devote themselves openly to the socialist cause; it is their trade to be agitators. To still others the spirit of unity of the members assures independent situations. For one member the others open a shop, for another they fit out a little restaurant, assuring them their patronage.

Thus there are in each locality agitators. They go to the suburbs or into the country in the evening or on Sunday to propagate their ideas. From the villages where the movement is strongly organized they radiate in all directions. But the party has its preferred orators. Some of them are in demand everywhere. These are the great chiefs, the "party divinities," Bebel, Liebknecht, Singer, Auer. The brilliancy of their great name is counted on to attract the attention of the crowds.

It is not everything to have propagandists, there must be assembly halls: this is one of the great difficulties of the propaganda. The authorities exert a pressure upon the restaurant-keepers to prevent their renting their halls to socialists. In the villages with garrisons, the procedure employed consists in forbidding to the military the establishments which socialists frequent: this is the military boycott. In order to retain their patronage some restaurant-keepers in Saxony went so far as to suspend at the

doors of their houses signs bearing these words: "Entrance forbidden to known socialists." The socialists borrow from their adversaries their weapon, the boycott. They make known to the proprietor who refuses his hall that the members will not patronize him as long as the hall is not at their disposal. When the working population is well organized and well disciplined, the boycott succeeds. The socialists have at Berlin only one small hall of their own; by a well-conducted boycott they have acquired all that they need.

In certain localities the members have combined to buy or construct establishments with an assembly hall: they have founded working men's casinos. But even then the problem is not definitely settled. When the authorities are displeased with these casinos they throw a thousand difficulties in their way. In the country very often the socialists cannot obtain a hall, but they are not discouraged, they hold their meetings in the open air, they speak in the fields. But often the police forbid these open-air meetings.

When the socialists have succeeded in procuring a hall, they are not at the end of their difficulties. If the law in regard to public assemblies varies in different states of the empire, it is almost everywhere severe and everywhere it is rigorously interpreted against the socialists. Although the law of exception no longer exists, they are always treated differently from other citizens. These measures, however, do not arrest the success of the party. On the contrary, they create sympathy for the socialists. Social Democrats agree in recognizing that the police authorities, by forbidding public meetings, dissolving societies, and seizing leaflets, bring about the inverse result of the one sought. These measures of repression awaken the attention of the masses.

When the meeting is authorized it does not take place, except in a few states of the South, without one or two police officers in uniform taking their place near the orator and stenographing his words. And even then they attempt to prevent the speaking on the slightest pretext.

When the propagandists venture into the agricultural regions, which are the fiefs of the *Junker*, or well dominated by the clergy, they are often the object of violence from part of the population. When meetings take place it is not rare that they are disturbed by cries, and end in scuffles. If it happens that the socialists obtain a hall in a new country, the priests, schoolmasters, manufacturers, and proprietors come to the meeting and try by their interruptions to create a disturbance.

The conferences of the socialists are always controversial. When the orator has finished speaking a discussion opens. The opponents speak and the orator replies. In the country the people who are little informed, and often do not know how to read, follow the orator with difficulty. Therefore after the meeting he does not withdraw, but converses with them in little groups, giving explanations to each one. He comes back ten times to the same point and begins again without discouragement the same course of reasoning. Leaflets, papers, and pamphlets are distributed to the auditors. An attempt is made to form relations with the inhabitants of the place. A few months after another meeting is held. When a little nucleus of members has been created, the care of continuing the agitation is intrusted to them. The funds they need are sent to them and the writings of propagandism. It is the principle of the Social Democrats to make arise from each medium men charged with spreading socialist ideas. The industrial centers have been conquered the day when the working men are addressed by their fellow laborers.

The most active form of socialist agitation in Germany is the electoral agitation. In becoming a great political party the Social Democracy has felt the need of utilizing its power to ameliorate as much as possible the situation of the laboring classes. The members take part without compromise in all the elections in which present legislation permits them to participate with chances of success, and each one is for them an occasion for propagating their ideas. In the elections for the Reichstag, the socialist agitation at-

tains its maximum intensity. It extends over all the territory; everywhere candidates are brought forward, the party treasury is emptied, the reserve funds are exhausted; the ideas of the party penetrate into the most remote regions. The opponents of the party say that the general elections are for the Social Democracy like great tides "which leave everywhere after them in the country little ponds in which the socialist bacillus develops in order then progressively to infect the neighborhood."

During the electoral period meetings are organized on all sides, pamphlets and leaflets inundate the country. The political situation is exposed, what the party in power has done for the people is related, the people are shown that it is upon them that the heaviest taxes fall, and are warned of the dangers which threaten them. The principles of the party are affirmed.

The agitation commenced in the country during the elections continues to the Reichstag. For the German socialists the principal object of parliamentary activity is propagandism. Debates upon the budget are for them an occasion for criticizing the manner of distributing imposts and the entire present social order. They propose bills. If they are rejected, this check serves to show them that the only party which really represents the interests of the workmen is that of the Socialist Democracy, and in order that the great speeches made in the Reichstag may produce their entire effect in the country they are printed in the form of pamphlets and scattered. In 1893 there took place the far-famed debate upon "The Future State." Seventeen hundred thousand copies of the speech of Bebel were distributed.

The party finds a valuable auxiliary in the professional unions of working men, which are now a power. About 350,000 workmen are members of centralized unions. The law regarding associations forbids these unions to occupy themselves with politics and limits their action to defending the professional interests of their members. But without entering into politics they furnish recruits to the Social Democracy. The workman, indifferent to the final end pursued by the party, is influenced by the perspective of near-by material advantages and enrolls in the union. Now, in fact, the great majority of the members of the union are socialists. The chiefs of the union are almost all active in the political movement. The newcomer, still a stranger to economic and social problems, will find himself placed in a socialist environment. No mention is made in the meeting of the party and the elections, but the principle of the antagonism of labor and capital is professed; the struggle for salaries is prepared; strikes are organized; subsidies are sent to striking workmen at the other end of the empire, sometimes in other countries, beyond the mountains, beyond the seas. The union thus acquires a feeling that it is engaged in a great struggle, it forms combative habits. Furthermore, the union has its journal, and the journal may occupy itself with politics; the union has its public meetings, and in these public meetings political subjects are not forbidden. And the orator says what the journal says, that a single party represents in the political world the interests of the laboring class—the Social Democracy. The newcomer is gained little by little; the members do not fail to take him to the public meetings of the party; on the days of their great celebrations, the 18th of March and the 1st of May, he will follow the others; on election day he will go with them to cast his vote.

The press, pamphlets, public gatherings, political circles, and unions are not the party's only means of action. Its members are found in societies for games, for singing, for instruction, at the socialist fêtes, in the little party restaurants. These restaurants are distinguished from other little restaurants in that they are not entirely public restaurants. They are organized, disciplined groupings.

Like the little restaurants, the different societies that the members frequent form rallying places. It is by the great number of groups which they organize, societies for all sorts of games, clubs of smokers, singing societies, societies for instruction, unions as

well as political societies, that the Social Democrats are on the way toward assuring the diffusion in a few days of hundreds of thousands of new party publications. It is by these too that they prepare the success of the great public meetings, the assemblies of the masses.

The fêtes of the party are numerous. Besides those which are special to each society, there are celebrated in almost all Germany the two great solemnities of the 18th of March and the 1st of May, which are for the socialist the fête of the past and mourning and the fête of the future and hope. For the 18th of March public meetings are organized where the signification of this double anniversary is recalled—the ephemeral victory of the people of Berlin in 1848 and that of the Parisians in 1871.

The labor movement in Germany is not simply an economic and political movement. The chiefs of socialism, Marx and Engels, founded their doctrine and their policy upon a philosophical view of the world. Lassalle had spread among the masses the saying of Bacon, "Knowledge is power." The German labor movement is on one side a movement of intellectual culture. This characteristic appears clearly when the interior life of the socialist groups is examined.

The political circles have conferences of study in their sessions. They concern themselves especially with economic and social problems, but it is not rarely that they are occupied with scientific questions.

Before the law against socialists there existed already in Germany societies for the instruction of workmen. Under the *régime* of exception these took on a great importance. When people could not unite in political groups, they met there.

At Berlin in the last four years of the *régime* of exception appeared lecture clubs, debating clubs, clubs for instruction. People became enamored of literary questions, modern art, realism, naturalism. They read Ibsen, Hauptmann, Zola, Guy de Maupassant. They were pleased with a painting of society which did not dissemble its uglinesses. They considered scientific and social questions also. The Social Democracy possesses also at Berlin an institute for the instruction of workmen and two free people's theaters.

The example of Berlin had been followed in the provinces, Hamburg and Hanover possessing their free people's theaters. Here the artistic culture of the members is pursued before anything else, but when the occasion presents itself other considerations are not dissembled.

The artistic emotion does not entirely stifle the instinct of combat in the members, but it would be to misunderstand the meaning of these free theaters of the people to see in them only instruments of propagandism, just as it would be to misunderstand the meaning of the societies of instruction to see in them exclusively schools of orators and agitators. The declared intention of the Social Democracy is to elevate the people, to open to them the domain of science as well as the domain of art. In doing this they do not believe in forgetting the final end of socialist action. Just as they struggle in the unions to obtain the best conditions of work and to double the vital force of the workman, so they seek to increase his intellectual power. They say that it needs robust natures, solid intelligences, ideal minds to wage war against present society and prepare the longed-for society of the future.

HISTORY AS IT IS MADE.*

November Elections. Returns of elections held in nearly all the states of the Union last month indicate Republican control of both branches of the Fifty-sixth Congress, whose term begins March 4, 1899. The president thus secures support for the administration policy at a critical juncture. The next Senate of the United States will have an ample working majority of Republican members, estimated at seventeen. The next House of Representatives will probably be Republican by a majority not more than one quarter the majority in the present House. Generally speaking, the Republicans lost in congressional elections in Eastern States and gained in Western States (Illinois and Indiana excepted). Republican gains in control of legislatures which will elect United States senators appeared in all sections except the South. Fusion state tickets were successful in five states, Colorado, Idaho, Minnesota, Montana, and Nebraska. Fourteen states (styled southern save Utah) reported straight Democratic victories. Republicans at this writing claim victory for state tickets in twenty-four states. Among the notable Republican victors are Theodore Roosevelt, governor of New York; W. A. Stone, governor of Pennsylvania; Hazen S. Pingree, governor of Michigan (reelected); W. E. Stanley, governor of Kansas; Henry Gage, governor of California. The Republican majority in Ohio was remarkable for an "off year." The defeat of fusionists in legislative contests in the Dakotas and the state of Washington is especially noteworthy.

The Peace Commission at Work. Although nothing official has been given out by the peace commissioners concerning their deliberations in Paris, reports of the proceedings indicate that three out of the four important sections of the protocol have been disposed of. In accordance with its provisions the Spanish government gives up all sovereignty and title to Cuba. The Spanish commissioners endeavored to secure from the United States an assumption of the so-called Cuban debt, amounting to

THE SPANISH PEACE COMMISSIONERS.

* This department, together with the book "Europe in the Nineteenth Century," constitutes the special C. L. S. C. course Current History, for the reading of which a seal is given.

nearly five hundred million dollars. They claimed that the United States succeeded to sovereignty in the island and that this debt went with the sovereignty. The United States commissioners, however, contended that this government merely aided Cuba to secure her freedom; that Spain incurred the obligations in attempting to maintain her sovereignty and took the chances of war upon them, and that the United States has assumed neither sovereignty nor the financial obligations. Under the terms of the protocol, Puerto Rico and other islands of the West Indies have been ceded to the United States, together with one of the islands of the Ladrone archipelago (Guam). The evacuation of Cuba and Puerto Rico proceeds. The section of the protocol dealing with the Philippines reads as follows:

> The United States will occupy and hold the city, bay, and harbor of Manila, pending the conclusion of a treaty of peace which shall determine the control, disposition, and government of the Philippines.

It is understood that the American commissioners demand the entire group of the Philippines, proposing to assume only that part of the Philippine debt which has been expended in public works, permanent improvements, etc., to an amount not exceeding $40,000,000. The Spanish commissioners insist that under the terms of the protocol the United States has no ultimate rights in the Philippines except those which Spain shall grant in the course of the present negotiations for a treaty of peace. The Spanish commissioners further claim that the United States has unlawfully held Spaniards prisoners since the date of the protocol suspending hostilities; that we have unlawfully appropriated customs duties; that it was understood when the protocol was signed that Spanish sovereignty in the Philippines was not questioned, and that the capture of Manila after the protocol was signed does not in any sense make the United States the possessor of sovereignty over the islands through conquest.

New Political Figures.

To the office of first assistant secretary of state, President McKinley has appointed David J. Hill, ex-president of Rochester University. Dr. Hill is a graduate of Bucknell University, and became president of that institution in 1879. He is widely known through his series of text-books on rhetoric, and has published books on socialism and psychology. He was president of the University of Rochester from 1889 to 1896, and took active part in recent political campaigns. He returns to Washington from Paris, where he has been attending lectures on international law.

DAVID J. HILL.
Assistant Secretary of State.

From the state of Oregon comes a new senator to succeed Mr. Corbett in the upper branch at Washington. After a long contest the Republicans in the state legislature agreed to support Joseph Simon, of Portland, who is an advocate of retaining the entire group of Philippine Islands and whose election is a gain for the gold standard forces in a doubtful section. Senator Simon is a Jew, born in Germany in 1851, but a resident of Portland since 1856. He will not be the first Jew to hold a seat in the Senate, three others having preceded him: D. L. Yulee, of Florida, J. P. Benjamin, and B. F. Jonas, both of Louisiana.

An Indian Outbreak.

With foreign problems to face we are not without home troubles to look after. In the Northwest an Indian outbreak has arrested public attention. Eight soldiers were killed and twelve wounded in an encounter with the Pillager tribe of the Chippewa nation, Minnesota. Among the killed was Major M. C. Wilkinson, who had recently returned from the Santiago campaign. It is admitted without hesitation that the outbreak was due to the conduct of white men. The Indians have been victimized by those who sought to make profit out of the timber rights belonging to the Indians; the open conflict took place because of the attempt of deputy-marshals to compel one of the Pillager chiefs to testify regarding violations of the liquor laws. It had been the practice of these marshals to bring such witnesses hundreds of miles to the cities of Duluth and Minneapolis, and they had made a business of not only making the fees out of such cases, but of dividing with those who boarded such witnesses and leaving the Indians to get back to their reservations as best they could. A chief who had walked all the way home on a previous occasion refused to leave his reservation to testify again, and it was in taking his part against the deputies and the soldiers who accompanied them that the bloody encounter broke out. The outbreak served to direct attention to the wrongs suffered by the Indians, and the commissioner of Indian affairs is quoted as expressing the opinion that the white people have been sufficiently scared to let the Indians alone for a time.

Labor Conflict in Illinois.

In the state of Illinois labor troubles culminated in a pitched battle at Virden, in the coal-mining region, resulting in the death of twelve men and the wounding of about twice that number. The immediate occasion of this conflict was the arrival of a train-load of negroes imported from southern states by the Chicago-Virden Coal Company. Trouble had been brewing in these regions ever since the first of April, when the coal companies decided that they could not pay the scale which had been fixed for the different districts throughout the country after the strikes in Pennsylvania and West Virginia. The miners' organization demanded wages according to the scale;

SENATOR JOSEPH SIMON, OF OREGON.

the coal companies offered about two thirds the scale. The state board of arbitrators tried to secure a compromise, but the companies refused to grant the compromise figure. The next move on the part of the companies was to secure men at the wages offered. Stockades were built about the mines and armed guards employed to protect the property. The governor was also informed that the companies expected protection of their property by the state troops if necessary. When negroes were brought into the town of Pana several riots occurred, and the governor sent troops to the scene to preserve order, but instructed them not to assist the mine-owners in operating their mines with imported labor. From Virden the governor was informed by the Chicago-Virden Company that protection was expected upon the arrival of men to work its mines. The governor, however, responded that the company would bring such labor into the state at its peril. When the attempt was made to run a train-load of negroes into the stockade a general conflict took place, in which strikers, armed guards

on the train, and guards of the stockade were killed and wounded. The negroes were sent to other cities to be cared for, and the governor sent troops to Virden under orders to disarm not only the strikers, but the guards of the stockade. In public prints the governor and the officials of the coal company accused each other of responsibility for the bloodshed. Governor Tanner went so far as to declare that the mine-owners would be prosecuted in the courts for murder; he declared that state inspectors had found out that a number of the negroes imported came from convict labor gangs in the South, and he asserted that even if the law did not warrant him in prohibiting the importation of such labor to compete with that of Illinois citizens, he believed that he was warranted in prohibiting its entrance to the state in accordance with his judgment of public sentiment. On the other hand, the governor was roundly abused for failing to protect the company in its exercise of legal rights, and in many quarters the president of the United States was declared to be derelict in his duty of seeing that property rights were properly protected under the provision of the constitution of the United States.

Whites vs. Blacks. The approach of the fall elections in the South was marked by signs of an irrepressible conflict between the whites and the blacks. In two days the newspapers reported the killing of ten negroes and four white men, and the wounding of four negroes and seven white men in five Southern States—Mississippi, North Carolina, Tennessee, Alabama, and Texas. In North Carolina the race issue was made a part of the state campaign, apparently to the exclusion of any other issue. It appears that the political combination of Republicans and Populists had resulted in the election of a Republican governor and the filling of many minor offices throughout the state by negroes. The Democrats early raised the issue of "negro domination," and a number of riots marked the early stages of the campaign. The principal papers of the state insisted that the race question was not a party question, as the fusionists claimed, and throughout the newspaper press of the Southern States the necessity of preserving government by white men was generally insisted upon. The claim was made that the conflict in Illinois showed that not in the South alone must the negroes be given to understand that this is, and must be, a "white man's country."

Dreyfus Case Revision. The famous Dreyfus case has gone into the hands of the Court of Cassation, from which a final decision may reasonably be expected.

CAPT. ALFRED DREYFUS.

The reports from which the progress of the case was outlined in this department last month proved to be somewhat inaccurate. The fact seems to have been that at first the case was submitted only to a committee of the court, and that the committee was evenly divided for and against revision. The Brisson cabinet thereupon referred the case to the full court, which, after a hearing, has decided that the first Dreyfus court-martial was illegal. The court has also undertaken a supplementary inquiry into the case, refusing to liberate Captain

Dreyfus pending its decision. The most sensational feature of the review of the case upon which the court based its action consisted of part of a letter reciting interviews which Colonel Picquart had with General Gonze, the former asserting that Dreyfus was innocent, and the latter stating that General Mercier, ex-minister of war, and General Saussier, ex-military governor of Paris, were mixed up in this affair, and asking if Colonel Picquart wished to compromise them. It is asserted that the Court of Cassation has the alternative of deciding the guilt or innocence of Dreyfus, or referring the case to a new court-martial, so that either a final decision or a further trial of the case may be the outcome. The Brisson cabinet, which succeeded in deferring the case to the court, has gone out of power by reason of failure to secure a vote of confidence in the Chamber of Deputies. That body during a disgracefully riotous session supported a resolution demanding an "end to the campaign of insult against the army," after having passed, by a comparatively small majority, a resolution presented by the government affirming the supremacy of the civil power. The Brisson cabinet fell after the resignation of M. Chanoine, the fifth minister of war who has declared his conviction that Dreyfus is guilty. A new cabinet has been formed with M. Charles Dupuy as premier and M. De Freycinet minister of war. The latter is a civilian, has been four times prime minister, and is supposed to favor a revision of the Dreyfus case.

MAJOR MARCHAND.

Fashoda. In spite of the change in the cabinet of France, no change has taken place in the Foreign Office, M. Delcasse holding over. And the foreign policy of France is considered no small factor in the national crisis which continues to hang over the French Republic. It has been supposed that some foreign complications might yet serve to give the army an opportunity to offset the injury suffered by the developments in the Dreyfus case. It seemed for a time that a clash between the French and English in Africa could not be avoided. The victory of General Kitchener over the dervishes at Obdurman had hardly been recorded when Major Marchand, a French explorer, accompanied by a few men, had reached Fashoda on the Nile, a few hundred miles south of the scene of General Kitchener's triumph. Fashoda is within the territory claimed to have been reconquered by the British forces, and Great Britain declared at once that Major Marchand's arrival with the French flag did not constitute a conquest, and that he must withdraw. To understand the conflict of claims thus brought to light, it is to be remembered that the French have been seeking to

EMPEROR WILLIAM II.

LUCIEN LEE KINSOLVING.
Protestant Episcopal Missionary Bishop of Rio Grande de Sul.

extend their sphere across Africa from possessions in the East and West, while England's operations are popularly reckoned as part of a project to connect her possessions in Egypt on the north with Cape Town colony on the south. Fashoda is, consequently, a sort of crossroads. It is announced authoritatively in Great Britain that France has agreed to withdraw from Fashoda, whither General Kitchener immediately sent an expedition and raised the British flag. Lord Salisbury says that although France has agreed to evacuate that point, serious complications with the French government are by no means wholly terminated. And the French press intimates that the entire question of British occupation of Egypt may be expected to come before all the powers interested, on account of Great Britain's present attitude.

Emperor William's Pilgrimage. Emperor William of Germany has been making a spectacular trip to the Holy Land, with the avowed object of participating in the dedication of the Church of the Redeemer, at Jerusalem. This church is located upon ground given to King William I. of Prussia by the sultan of Turkey many years ago, and German contractors have erected the building. On the way to Jerusalem the emperor and his wife were the guests of the sultan at Constantinople, where public demonstrations were held in honor of the distinguished visitors, and gifts showered upon them by the ruler of Turkey. Incidentally, the emperor, while at Constantinople, turned over the gift of the abode of the Virgin Mary to the German Catholics, a move which seemed to create quite as favorable an impression among Catholics as the journey to dedicate a Protestant church in Jerusalem serves to make upon German Protestants. Reports of political understandings between the kaiser and the sultan as a result of their meeting have found their way into print, together with the story of an anarchist plot at Alexandria against the life of the emperor.

Church Movements. Church problems in our new possessions confront denominational organizations, and the various boards of missions of Protestant denominations have taken steps to secure representation in the new fields. The Roman Catholic Church has already appointed Archbishop Chappelle, of New Orleans, apostolic delegate to Cuba. The Protestant Episcopal Church, through its General Con-

THE LATE COL. GEORGE E. WARING.

vention held in Washington, has taken a notable step in deciding to establish missions in Roman Catholic countries. By the selection of Rev. Mr. Kinsolving as missionary bishop-elect, this church has inaugurated a movement to establish an autonomous church to be known as the Church of the United States of Brazil. The plan further contemplates the establishment of two other churches of this character in other Roman Catholic countries.

Important Court Decisions.

The amount of history made by the courts in this country is not always appreciated. The Supreme Court of the United States, in a decision read by Justice Peckham, has declared the Joint-Traffic Association to be unlawful and thus made of no effect an agreement between more than thirty of the great railroad systems in this country. The railroad companies had agreed upon a plan of central management calculated to prevent rate-cutting, but the Supreme Court found that the agreement constituted a restraint of trade which was unlawful under the Interstate Commerce Act, and that such an agreement was also a violation of the anti-trust law known as the "Sherman Act" of 1890. The court discovered no essential difference between this association and the Trans-Missouri Freight Association, which a previous decision of the Supreme Court had declared unlawful. The court took the ground that the effect of such an agreement was to stifle competition and that Congress was the judge of the necessity and propriety of legislation to control or prohibit such a combination so far as it operates upon and restrains interstate commerce. At the same time, the Supreme Court decided that the Kansas City Live-Stock Exchange and another exchange similar to it, organized by cattle-dealers in Kansas and Missouri, were purely local associations, not engaged in interstate traffic within the meaning of the anti-trust law, and therefore not unlawful.

Two decisions from the Supreme Court of the state of Illinois are exceedingly interesting. The Illinois court decided that the Pullman Palace Car Company had violated the provisions of its charter, having had no right to own the city of Pullman or to own stock in other corporations. The court decided that the company had a right to own the buildings in which its general offices are located, to own land for the handling of its cars, and that it could properly furnish power to another industry located there. But the company had taken upon itself the exercise of various unlawful practices under that clause of its charter which gave it the privilege to exercise powers necessary for the prosecution of its business. The decision of the court confines the company to the exercise of only those powers strictly defined by its charter. Another decision by this court

THE LATE PIERRE PUVIS DE CHAVANNES.

upholding the constitutionality of the Torren's systems of registration of land titles in Cook County (Chicago) determines the practicability of a system which is likely to be sooner or later adopted in state after state of the Union. Massachusetts has a similar law already in operation. It provides for the registration of the title to land with a county official and renders the expensive searching for titles by lawyers and title companies unnecessary.

Col. George E. Waring. Col. George E. Waring, who died on October 29, attained prominence through services of a unique character. He sacrificed his life in undertaking a commission from the president to investigate the sanitary conditions in Cuba, dying of yellow fever after his return to New York City. Colonel Waring's career has been called typically American. It began with the study of engineering, agriculture, and agricultural chemistry. He was in turn manager of the Greeley Experimental Farm; drainage engineer of Central Park, New York City; manager of the Ogden Farm; in charge of the sewerage system in Memphis when the yellow fever broke out there in 1878 (he introduced original methods of separating house drainage from surface drainage, which have been adopted in many cities); member of the National Board of Health, and assistant engineer of New Orleans. When war broke out in 1861 he was commissioned a major, and rose to be a colonel, commanding the Fourth Missouri Cavalry. He became head of the Street Cleaning Department of New York City in 1895, and, within three years, in spite of ridicule and opposition, thoroughly reformed the department and gained international reputation thereby. Colonel Waring was an Independent in politics, and wrote a number of interesting stories and tales of travel.

Obituary. During November occurred the death of M. Pierre Puvis de Chavannes, a French painter, who became best known in this country by his paintings for the Boston Public Library. His work of decorating the most important parts of the walls surrounding and enclosing the staircase in that building includes a central composition entitled "The Muses Greeting the Genius of Enlightenment," together with panels representing Astronomy, Chemistry, Physics, History, and Philosophy, Pastoral, Dramatic, and Epic Poetry. He was born in Lyons in 1824, and his first picture was accepted at the Salon in 1859. Of his decorative pictures, the best examples are said to be in the Sorbonne and the Pantheon. Harold Frederic, London correspondent of the New York *Times*, died at Henley on October 19 at the age of forty-two.

THE LATE HAROLD FREDERIC.

He was a graduate of Hamilton College and became chief editorial writer of the *Utica Observer* and editor of the *Albany Evening Journal*, leaving that position to become London correspondent in 1884. Of nine novels which he wrote, perhaps the best known are "The Damnation of Theron Ware" and "March Hares." The month's obituary record also includes the name of David A. Wells, of Connecticut, who began to be known as an economic writer at the time of the creation of the national debt to meet the expenses of the Civil War.

C. L. S. C. OUTLINE AND PROGRAMS.

OUTLINE OF REQUIRED READING.

FOR DECEMBER.

First Week (ending December 3).

"Twenty Centuries of English History." Chapter X.

"Europe in the Nineteenth Century." Chapters XVII. and XXII.

In THE CHAUTAUQUAN:

"The Central Element of Organized Matter."

Second Week (ending December 10).

"Twenty Centuries of English History." Chapter XI.

"Europe in the Nineteenth Century." Chapters XXIII., XXIV., and XXV.

In THE CHAUTAUQUAN:

"The Immensity of London."

"The Human Life of God."

Third Week (ending December 17).

"Twenty Centuries of English History." Chapter XII.

"Europe in the Nineteenth Century." Chapters XXVI. and XXVII.

In THE CHAUTAUQUAN:

"Sir Robert Peel."

Fourth Week (ending December 24).

"Twenty Centuries of English History." Chapter XIII.

"Europe in the Nineteenth Century." Chapters XXVIII., XXIX., and XXX.

In THE CHAUTAUQUAN:

"Telegraphs and Telephones."

"Factory Life and Legislation in England."

FOR JANUARY.

First Week (ending January 7).

"Twenty Centuries of English History." Chapter XIV.

"Europe in the Nineteenth Century." Chapter XVIII.

In THE CHAUTAUQUAN:

"Old Bailey."

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FOR DECEMBER.

First Week.

1. The Lesson.
2. An Essay—Socialism in Europe.
3. A Paper—The Russian peasantry.
4. A Paper—Church and state under Henry VIII. of England.
5. Book Review—"The Cloister and the Hearth," by Charles Reade.

Second Week.

1. The Lesson.
2. A Paper—The Elizabethan era.
3. Book Review—"Westward Ho!" by Charles Kingsley.
4. A Geographical Study—The Turkish Empire.

Third Week.

Cromwell Day—December 16.

"Never was any man so conspicuously born for sovereignty."

1. A Talk—Cromwell's ancestry.
2. Biographical Sketch—Cromwell's early life.
3. A Paper—Cromwell's career as a soldier.
4. Historical Study—England under Cromwell.

Fourth Week.

1. The Lesson.
2. A Paper—Scotland under Cromwell and Charles II.
3. Select Reading—"The Grey Champion," by Hawthorne.
4. A Paper—The political situation in Europe.

FOR JANUARY.

First Week.

1. The Lesson.
2. Historical Study—Ireland.
3. A Paper—The development of the English Parliament.
4. A Paper—Protestantism in the seventeenth century.

SYLLABUS OF C. L. S. C. READING.

REQUIRED READING IN THE TEXT-BOOKS.

"TWENTY CENTURIES OF ENGLISH HISTORY."

X.—THE TUDOR DESPOTISM, 1485 A. D.—1547 A. D.

1. General survey of the Tudor dynasty (p. 161).
2. The reign of Henry VII. (pp. 161–166).
   (1) Previous limitations on royal power.
   (2) Early despotic monarchs.
   (3) The king's first care.

"The king-maker." See page 155 of the text-book.

   (4) The pretenders.
   (5) Henry's tyranny.
   (6) Changes in weapons of warfare.
   (7) Methods of raising money.
   (8) The king's death.
   (9) Royal marriages.
3. The reign of Henry VIII. (pp. 166–183).
   (1) The king's character.
   (2) Reception of the king.
   (3) The Holy League.

"Guinegate" [gēn-gāt']. A town in Northern France.

   (4) Flodden Field.
   (5) Seven years of peace.
   (6) Alliance of England with Germany.
   (7) Foreign war.
   (8) Fall of Wolsey.
   (9) Rise of Cromwell.
   (10) Quarrel with the pope.
   (11) The act of supremacy.
   (12) Reorganization of the church.
   (13) Abolition of the monasteries.
   (14) The revolt.
   (15) Distribution of spoils.
   (16) Beginning of the Reformation.
   (17) Use of the English Bible.
   (18) The Six Articles.
   (19) Cromwell's fall.
   (20) Condition of Parliament.
   (21) Reforms of doctrine.
   (22) Council of Trent.
   (23) Martyrdom.
   (24) The king's death.
   (25) Affairs in Scotland.

REVIEW QUESTIONS.

1. When Henry VII. ascended the throne what limitations had been placed on the royal power?
2. Describe Henry VII.'s method of administration.
3. What royal marriages assume importance in the history of the sixteenth century?
4. Give a history of the Protestant Reformation during the reign of Henry VIII.
5. What was the central event of Henry VIII.'s reign, and to what did it lead?

SEARCH QUESTIONS.

1. What secured for Wolsey the deanery of Lincoln?
2. How did King Henry VII. regard the movement known as the Revival of Letters?

XI.—THE LATER TUDORS, 1547 A. D.—1603 A. D.

1. The royal will (p. 184).
2. The government under Edward VI. (pp. 184–189).
   (1) The regency.
   (2) Affairs in Scotland.

"Pinkie Cleugh" [klĭŭg]. A place a few miles east of Edinburgh.

   (3) Ecclesiastical reforms.

"Bucer" [bū'ser]. A German, and one of Luther's co-workers. He was a professor of theology in Cambridge.

"Martyr." An Italian by birth and a Catholic by education. After his conversion to the Reformed religion he became a professor of theology at Strasburg, and in 1549 he was appointed to the professorship of divinity at Oxford.

   (4) Methods of reform.
   (5) Discontent among agriculturists.
   (6) Fall of Somerset.
   (7) Institutions founded by Edward.

The Blue Coat School, so called from the dress of the pupils, is one of London's oldest institutions for the education of poor fatherless children and foundlings.

   (8) Death of Edward VI.
   (9) The plans for the succession.
3. The reign of Queen Mary (pp. 189–195).
   (1) The fall of Northumberland.
   (2) Restoration of the old religious system.
   (3) The Spanish marriage.
      (*a*) Object of the alliance.
      (*b*) Opposition.
      (*c*) Executions.
      (*d*) Parliamentary acts.
   (4) Attacks against Protestantism.
   (5) The queen's misfortunes.
4. The reign of Queen Elizabeth (pp. 195–214).
   (1) Education and character of the queen.
   (2) Attitude toward the Reformation.
   (3) Repeal of ecclesiastical laws.
   (4) Philip's power.
   (5) Catholic reaction.
   (6) The queen's diplomacy.

(7) Danger in the North.
(8) The Test Act.
(9) Deposition of Queen Mary.
(10) Elizabeth's perplexities.
(11) Bull of Deposition.
(12) Conspiracies.

"Ridolfi" [re-dol'fe]. An Italian banker and merchant in London who was secretly engaged in the pope's service. He also acted as an agent for some continental princes.

(13) The new sects.
(14) Progress of Protestantism.
(15) Work of the Jesuits.
(16) Years of peace.
(17) The Catholic League.
(18) Leicester's expedition.
(19) Plot of Babington.
(20) The Spanish war.
(21) Result of Elizabeth's diplomacy.
(22) Affairs in Ireland.
(23) The queen's attitude toward Parliament.
(24) Commercial interests.
(25) The queen's last years.

REVIEW QUESTIONS.

1. Sketch the progress of Protestantism from 1547 to 1603.
2. Give an account of the reign of Mary Tudor.
3. What circumstances determined the policy of Queen Elizabeth?
4. Describe the Spanish war in Elizabeth's reign.
5. Describe the general progress of the English nation in Queen Elizabeth's reign.

SEARCH QUESTIONS.

1. Who was the first English sovereign to disclaim religious differences as a ground for execution?
2. Who was at the head of the commission which composed the first English prayer-book?

XII.—CAVALIER AND ROUNDHEAD, 1603 A. D.—1649 A. D.

1. The reign of James I. (pp. 216–225).
(1) The king's character.
(2) The Millenary Petition.
(3) Conference at Hampton Court.
(4) The king's theory of government.
(5) First Parliament.
(6) Gunpowder Plot.
(7) Question of revenue.
(8) Court favorites.
(9) The king's method of administration.
(10) Corruption in government circles.
(11) Proposed alliance with Spain.
(12) The third Parliament.
(13) Failure of the Spanish marriage.
(14) The fourth Parliament.

2. The reign of Charles I. to 1640 (pp. 225–237).
(1) Personality of the king.
(2) The first and second Parliaments.
(3) The Rochelle affair.
(4) The war loan.
(5) The third Parliament.
(a) Prominent members.
(b) Petition of Right.
(c) The king's power.
(d) Arrest of members.
(6) Period of personal government.
(a) The three assistants.
(b) Method of government.
(c) Sources of revenue.
(d) Persecutions.
(e) Efforts to reform the Scottish Kirk.
(f) Affairs in Ireland.
(g) The Short Parliament.
(h) The second Bishops' War.

3. The Long Parliament under Charles I. (pp. 237–249).
(1) Composition of Parliament.
(2) Proceedings before the autumnal recess.
(3) Ulster massacres.
(4) Grand Remonstrance.
(5) Bishops excluded from the House of Lords.
(6) Attempted arrest of members.
(7) Nineteen Propositions.
(8) Period of Civil War.
(a) Character of combatants.
(b) Second year of war.
(c) Alliance with Scotland.
(d) Marston Moor.
(e) The rise of Montrose.
(f) Establishment of Presbyterianism.
(g) Reforms in the army.
(h) Naseby.
(i) Close of the war.
(9) Parliament and the New Model.
(10) Charles delivered to Parliament.
(11) Increase of troubles.
(12) Renewal of war.
(13) Supremacy of Cromwell.
(14) Execution of Charles.

REVIEW QUESTIONS.

1. What was the first important subject brought to King James' attention and how did he deal with it?
2. Describe the parliamentary difficulties of King James' reign.
3. Explain the question of the Spanish marriage.
4. Explain the origin of the trouble between King Charles and Parliament.
5. Describe the period of personal government.
6. Give a history of the last nine years of King Charles' reign.

SEARCH QUESTIONS.

1. What was the immediate cause of the civil war in the reign of King James I.?
2. What discovery proved fatal to the cause of Charles I.?

XIII.—THE COMMONWEALTH AND THE RESTORATION, 1649 A. D.—1685 A. D.

1. The Commonwealth (pp. 250–256).
   (1) Rump Parliament.
   (2) Troubles in Ireland and Scotland.

"Drogheda" [drog'e-dä]. A seaport of Ireland.

   (3) Dissolution of Parliament.
   (4) Barebone's Parliament.
   (5) Cromwell's foreign policy.

The battle of the Dunes was fought on the sand mounds (dunes) near Dunkirk.

   (6) Military districts.

Colonel Penruddock led an unsuccessful rising in favor of Charles II. He was captured and executed.

   (7) The second Parliament.
   (8) Cromwell's death.
   (9) Richard Cromwell.

2. The Restoration (pp. 256–262).
   (1) General Monk.
   (2) Dissolution of the Long Parliament.
   (3) Fall of the Commonwealth.
   (4) Personality of Charles II.
   (5) Attitude of Parliament toward the king.
   (6) The king's chief adviser.
   (7) Measures against non-conformity.
   (8) Alliance with France.
   (9) War with Holland.
   (10) The cabal.
   (11) Question of the succession.

The Rye House Plot received its name from the building, Rye House, in Hertfordshire, in which the conspirators met.

   (12) Death of Charles II.

REVIEW QUESTIONS.

1. Give a history of the dangers to the government under Cromwell.

2. Give an account of the sessions of Parliament during Cromwell's administration.

3. Give an account of the fall of the Commonwealth.

4. Describe the legislative acts in the reign of Charles II.

5. Explain the origin of the terms Tory and Whig.

SEARCH QUESTIONS.

1. In what Parliament were the members from Scotland and Ireland first admitted on equal terms with those from England?

2. What kindled the quarrels in the Parliament of 1658?

"EUROPE IN THE NINETEENTH CENTURY."

XVII.—THE TRIPLE ALLIANCE.

1. The Dreibund (p. 190).
   (1) The members.
   (2) Object.
   (3) Character.

2. The German Empire (pp. 190–200).
   (1) Constitution.
   (2) Legislative and executive powers.
   (3) Character of the government.
   (4) The army.
   (5) Education and the church.

"*Bon voyage*" [bon voi-äzh']. A pleasant journey.

   (6) Conflict with the pope.
   (7) The Jewish question.
   (8) Socialism.
   (9) Formation of the alliance.
   (10) Recent factors in German politics.
   (11) The dual alliance.

REVIEW QUESTIONS.

1. Describe the composition of the German government.

2. Explain the legislative and executive functions of the government.

3. Explain the relation of the German state and church and tell what questions helped to complicate German politics.

4. Describe the character and purpose of the Triple Alliance.

5. What are the more recent factors in German politics?

SEARCH QUESTIONS.

1. What was one of the main points in the agreement made by the members of the Triple Alliance?

2. When Bismarck retired from the chancellorship what honors were conferred upon him?

PART V.—THE RECONSTRUCTION OF EASTERN EUROPE.

Preliminary.

1. Character of Eastern Europe.
   (1) Compared with the West.
   (2) Turkish rule.
2. The key to political power in Eastern Europe.
3. The Eastern Question.

XXII.—RUSSIA.

1. Geography of Russia (pp. 240–241).
   (1) Area.
   (2) Population.
   (3) Character of the people.
2. The national church (pp. 241–244).
   (1) Origin.
   (2) Character of the Oriental Church.
   (3) Characteristic features.
   (4) Schisms and dissenting sects.
3. The government (p. 244).
4. The *mir* and the peasants (p. 245).

"*Vodka*" [vōd'kä]. Russian whisky, distilled usually from rye but sometimes from potatoes.

5. The administration of Alexander I. (pp. 245–246).
6. The reign of Nicholas (p. 246).

7. Russia under Alexander II. (pp. 246–249).
   (1) Serfage.
   (2) Reforms of government.
   (3) Russian liberalism.
   (4) Revolutionary acts.
   (5) Assassination of Alexander.
8. Russia since 1881 (pp. 249–250).
   (1) Policy of Nicholas II.
   (2) Condition of peasants.

REVIEW QUESTIONS.

1. Give geographical facts about Russia.
2. Describe the national church.
3. Describe the government.
4. What governmental reforms have been made during this century?

SEARCH QUESTIONS.

1. When did Russia begin the conquest of Siberia?
2. Where are the most celebrated fairs of Russia held?

XXIII.—THE EMPIRE OF THE TURKS.

1. The character of the Turks (pp. 251–252).
   (1) Race and language.
   (2) Religion.
   (3) Social institutions and political ideas.
   (4) Progress.
2. The governmental system (pp. 252–253).
   (1) Character of the government.
   (2) System of taxation.
   (3) Protection to life and property.

"Laveleye" [läv-lā']. A Belgian writer of works on political economy.

   (4) Public administration.
3. The subject races (pp. 254–255).
   (1) Greeks.
   (2) Albanians and Bulgarians.
   (3) Servians and Montenegrins.
   (4) Roumanians.
   (5) Other races.
4. Early history of the Balkan peninsula (pp. 255–258).
   (1) Under Roman dominion.
   (2) Arrival of Slavs.
   (3) Bulgarian power.
   (4) The Servian Empire.
   (5) Conquest by the Turks.
5. The empire under Solyman.

REVIEW QUESTIONS.

1. In what are the Turks aliens to modern Europe?
2. Describe the Turkish administrative system.
3. What races are subject to Turkish rule?
4. Give a *résumé* of the early history of the Balkan peninsula.

SEARCH QUESTIONS.

1. In Turkish civil and political matters who is the chief executive officer under the sultan?
2. Who advises the sultan in religious and legal matters and by what is he guided?

XXIV.—THE EXPULSION OF THE TURKS FROM EUROPE.

1. Decline of Turkish power (p. 259).
2. Hungarian independence (p. 259).
3. Affairs in Greece (pp. 260–263).
   (1) Oppressions.
   (2) Revival of learning and commerce.
   (3) Insurrections and massacres.
   (4) Attitude of the great powers.
   (5) Nature of Greek government.
   (6) Independence.
   (7) Annexations.
4. The Slav states (pp. 263–265).
   (1) Montenegro.
   (2) Roumania.
   (3) Servia.
   (4) Bulgaria.
5. The advance of Russia (pp. 265–266).
   (1) Causes.
   (2) The first advance.
   (3) The Greek revolt.
   (4) The obstacle.

REVIEW QUESTIONS.

1. Give a brief account of the Greek struggle for independence.
2. Tell how the Slav states have won freedom.
3. What are the causes of the strained relations between Russia and Turkey?
4. Describe the progress of the Russian extension of power.

SEARCH QUESTIONS.

1. What English poet aided the Greeks in their struggle for liberty?
2. What demand made by the czar of Russia led to the Crimean War?

XXV.—THE EASTERN QUESTION.

1. Russian policy (p. 268).
2. Cause and character of discord between Russia and Turkey (pp. 268–269).
3. What the Eastern Question is (pp. 269–270).
4. The interests of the powers (pp. 270–272).
   (1) Russia's schemes.
   (2) Austrian interests.
   (3) English interests.
   (4) Complications from 1860 to 1870.
5. Outcome of the Herzegovinian revolt (pp. 272–275).
   (1) Turko-Prussian War.
   (2) Treaty of San Stefano.
   (3) The Berlin treaty.
6. Trouble between Servia and Bulgaria (pp. 275–276).
7. Governmental *régimes* (pp. 276–278).
   (1) Bulgaria.

(2) Servia and Roumania.
(3) Signs of progress.
8. The Cretan question (pp. 278–280).
9. Solutions of the Eastern Question (pp. 280–281).

REVIEW QUESTIONS.

1. Explain the cause of trouble between Russia and Turkey.
2. What is meant by the Eastern Question?
3. Explain why the different powers are deeply interested in this question.
4. Give an outline of the history of the Slav states.
5. What are some of the possible solutions of the Eastern Question?

SEARCH QUESTIONS.

1. What was the Andrássy note?
2. After the last Cretan revolution what decision did the powers make in regard to the government of Crete?

PART VI.—THE MINOR POWERS.

Preliminary.

1. Medieval European states (p. 283).
2. Formation of modern states (p. 283).
3. Survivals of medieval conditions (p. 283).

"Andorra" is in the Pyrenees Mountains.

"San Marino" is on a spur of the Apennines in Eastern Italy, in latitude about 43°.

4. Decadent powers (p. 283).

XXVI.—THE SMALL CENTRAL STATES.

1. History of Switzerland (pp. 284–287).
(1) Early period.
(2) Series of constitutions.
(3) Causes of discord.
(4) Constitution of 1848.
(5) The referendum.
(6) Races.

"Romansch." The people of Southeastern Switzerland and in the districts north of the Adriatic speaking the Romansch language, one of the Romance group of languages.

(7) Education.
(8) Character of the people.
2. History of the Netherlands (pp. 287–290).
(1) Physical features of the country.
(2) Two characteristic facts.
(3) In the French Revolution.
(4) Union with Belgium.
(5) Independence.
(6) Form of government.
(7) Characteristics of the people.
3. Belgium (pp. 290–291).
(1) Events in 1830.
(2) The government and people.
(3) The king.
(4) Suffrage laws.

REVIEW QUESTIONS.

1. Give an outline of historical events in Switzerland previous to 1848.
2. Describe the Swiss government.
3. Describe the physical features of the Netherlands.
4. Recount facts which show the character of the Dutch people.
5. Relate important facts concerning the Belgian government and laws.

SEARCH QUESTIONS.

1. In what is the legislative power of the Netherlands vested?
2. What international conference began its sessions in Brussels, August 7, 1897, and what countries were represented?

XXVII.—NORTHMEN AND SOUTHRONS.

1. Influence of geographical position on historical events (pp. 293–294).
(1) In Central Europe.
(2) In the Iberian peninsula.
(3) In the Scandinavian peninsula.
2. The northern and southern peninsulas contrasted (pp. 294–296).
(1) In race and population.
(2) In religion.
(3) In education.
3. Scandinavian history (pp. 296–298).
(1) Territory in 1800.
(2) Denmark and Sweden in the French wars.
(3) Peace of Kiel.
(4) Independence of Norway.
(5) Politics in Norway.

"*Storthing*" [stôr'tĭng].

(6) Government.
4. The southern peninsula (pp. 299–304).
(1) Spain at the opening of this century.
(2) Constitution of 1812.
(3) Reaction.
(4) Insurrection of 1820.
(5) Four decades from 1820 to 1860.
(6) Cause of Franco-Prussian War.

"Serrano" [ser-rä'nō].

"Prim" [prēm].

"Topete" [tō-pā'tā].

(7) Spain since 1870.

"Amadeo" [ä-mä-dā'ō].

(8) Affairs in Portugal.
(9) Decadence of the states.
(10) Characteristics of Spaniards.

"Narvaez" [när-vä-äth'].

(11) Colonial possessions.

REVIEW QUESTIONS.

1. Explain how historical events are related to geographical position.
2. Contrast the Scandinavian countries with Spain and Portugal.

3. Give an outline of Norwegian history since 1814 and describe the Scandinavian government.

4. Describe the revolutionary movements in Spain during this century.

5. What are the chief Spanish characteristics?

SEARCH QUESTIONS.

1. What is the name of the Danish Parliament?

2. When was obligatory military service introduced into Portugal?

PART VII.—TO-DAY.

Preliminary.

1. Nature of social and political problems (p. 305).

2. Physical achievements (p. 305).

3. Altered conditions of life (p. 305).

XXVIII.—PROGRESS OF THE WORLD.

1. General survey of the material progress in this century (p. 307).

2. The world's transformers (p. 307).

3. History of cotton and cotton manufacture (pp. 307–311).

(1) Introduction into Europe.

(2) First processes in cotton manufacture.

(3) Inventions and the result.

(4) Bleaching process.

"Berthollet" [ber-to-lā'].

(5) Printing calico.

(6) Increase of cotton supply.

(7) Center of manufacture.

4. Importance of the iron and coal industries (pp. 311–314).

(1) Extensive use of iron.

(2) First cause of a great impetus to iron manufacture.

(3) Inventions and their influence.

(4) Production of steel.

(5) Value of steam machinery.

5. Improvement in methods of transportation (pp. 314–315).

REVIEW QUESTIONS.

1. By what is the material progress of the century represented?

2. Describe the progress of cotton manufacture since its introduction into England.

3. By what has the utility of iron and coal been extended?

4. Show the progress in the methods of transportation.

SEARCH QUESTIONS.

1. When was the first turnpike road established by law in England?

2. Where was the first macadamized road constructed?

XXIX.—PROGRESS OF THE WORLD *(continued)*.

1. Development of the steamboat and steam railways (pp. 316–319).

2. Growth and importance of the telegraph system (pp. 319–320).

3. Effect of the Suez Canal on commerce (p. 321).

4. Improvement in steel manufacture (pp. 321–322).

5. Interdependence of inventions (p. 322).

REVIEW QUESTIONS.

1. Give an account of the introduction of the locomotive and the steamboat.

2. Describe the progress made in methods of communication and show its effect on commerce and transportation.

3. Explain the commercial importance of the Suez Canal.

4. What is the cause of the rapid improvements in machinery?

5. Show how the great inventions are interdependent.

SEARCH QUESTIONS.

1. By whom was the Suez Canal projected?

2. What is its length and how long did it take to complete it?

XXX.—QUESTIONS OF THE DAY.

1. The military situation (pp. 324–327).

(1) The Prussian system.

(2) The armament of other powers.

(3) Improved weapons.

(4) Two danger-points.

(*a*) Alsace-Lorraine.

(*b*) Constantinople.

2. Socialism (pp. 327–329).

(1) Various theories.

(2) State socialism.

(3) Anarchism.

(4) One cause of its ready acceptance.

3. Extension of universal suffrage (pp. 329–330).

4. Modification of feudal land tenures (pp. 330–331).

5. The twofold character of the principle of nationality (pp. 331–332).

6. The religious question (pp. 332–333).

"*Imperium in imperio.*" An empire within an empire.

7. General survey of European progress (p. 333).

REVIEW QUESTIONS.

1. Explain the two great dangers in international politics.

2. Describe the present socialistic tendency in European countries.

3. Among what classes are socialistic theories readily accepted, and why?

4. What is the result of the democratic tendency in modern states?

5. Illustrate the unifying and the disruptive force of the principle of nationality.

SEARCH QUESTION.

1. When was it demonstrated that France and Russia had entered into an alliance?

REQUIRED READING IN "THE CHAUTAUQUAN."

I.—"THE IMMENSITY OF LONDON."

1. Panorama of London (pp. 219–220).
2. Municipal affairs (pp. 220–226).
   (1) The governing bodies.
   (2) Government of the city of London.
   (3) Election, constitution, and duties of the County Council.

"*In locus parentis.*" In place of a parent.

   (4) The vestries and district boards.
   (5) Asylum and school boards.
   (6) The drainage system.
   (7) The streets.
   (8) The parks.
3. Establishment of clubs.
4. London's wealth and poverty.

II.—"TELEGRAPHS AND TELEPHONES."

1. Conditions sixty years ago (p. 227).
2. Present conditions (p. 228).
3. Effect on the individual and on business (pp. 228–229).
4. Extension of the telephonic field (p. 229).
5. Progress of the telegraph (pp. 229–230).
6. General benefits of the telephone and the telegraph (pp. 230–231).

III.—"SIR ROBERT PEEL."

1. Peel's influence on Gladstone (p. 231).
2. Teacher and pupil representatives of the present type of English statesmen (p. 231).
3. Early training (pp. 231–232).
4. The great figures in Parliament in 1809 (p. 232).
5. Traits of character (pp. 232–233).
6. Reputation as an administrator (p. 233).
7. Source of his reputation as a statesman (p. 233).
8. Attitude toward the Reform Bill of 1832 (p. 233).
9. The new sovereign (p. 233).
10. Peel called to the premiership (p. 234).
11. Second premiership (p. 234).
12. Repeal of the corn laws (p. 234).
13. Peel as a parliamentary leader (p. 234).
14. The statesman's personality (p. 235).
15. The Prince Consort's opinion of Peel (p. 235).

IV.—"THE HUMAN LIFE OF GOD."

1. Disappearance of Christ's manhood (pp. 235–236).
   (1) Examples of false Christology.
   (2) A twofold consciousness.

"Theanthropic." Embodying the divine and the human.

   (3) Character of his manhood.
   (4) Loss of Christ's humanity.

"Logos." In theology, the Divine word; the Second Person in the Trinity before and after Incarnation.

2. Longing for a human Savior (p. 236).
3. Mariolatry (pp. 236–237).

"Peter Lombard." An Italian theologian of the twelfth century. Thomas Aquinas lived a century later.

4. The search for Christ (p. 237).

"Peter Waldo." A French reformer of the twelfth century.

5. Christ of the New Testament (pp. 237–238).
6. Christ's self-renunciation and self-limitation (pp. 238–239).
7. What the Epistle to the Hebrews teaches (p. 239).

V.—"THE CENTRAL ELEMENT OF ORGANIZED MATTER."

1. A chemist's interest in a new discovery (p. 239).
2. Importance of carbon (pp. 239–240).
3. Various forms of the same element (p. 240).
4. Principal form of carbon in nature (p. 240).
5. Diffusion of carbon (p. 240).
6. Compounds of carbon (p. 240).

"Wöhler" [vē'ler]. A German chemist.

7. Temperature in chemical reaction (p. 241).
8. Non-gaseous character of carbon (p. 241).
9. Carbon combined with hydrogen (p. 241).
10. The homologous series (pp. 241–242).
11. Facts derived from the study of these compounds (pp. 242–243).

VI.—"FACTORY LIFE AND LEGISLATION IN ENGLAND."

1. Necessity of studying industrial codes (p. 243).
2. Work of early legislators (pp. 243–244).
3. Distinction between a factory and a workshop (p. 244).
4. Employees in factories and workshops (p. 244).
5. Protection for factory workers (pp. 244–245).
6. Regulation for unhealthy and dangerous industries (p. 245).
7. Investigation concerning the needs of factory women and girls (p. 245).
8. General conditions required in any factory (p. 246).
9. Reports of women factory inspectors (pp. 246–247).
10. Record of accidents (p. 247).
11. Limitation of factory and workshop hours (pp. 247–248).
12. The beginning of factory legislation (p. 248).

ANSWERS TO SEARCH QUESTIONS IN "THE CHAUTAUQUAN" FOR NOVEMBER.

"TWENTY CENTURIES OF ENGLISH HISTORY."

VI.

1. "Traitor! traitor!" "Were I a knight my sword should answer that foul taunt." 2. The Privy Council.

VII.

1. English Justinian; by governmental, judicial, and financial reforms. 2. The abbey church of Westminster.

VIII.

1. The English Channel ports, Hastings, Romney, Hythe, Dover, and Sandwich; Cinque Ports. 2. An earthquake; Council of the Earthquakes.

IX.

1. In 1426; because the barons' retainers appeared in Parliament carrying clubs on their shoulders. 2. It checked the progress of freedom for nearly a century.

"EUROPE IN THE NINETEENTH CENTURY."

IX.

1. Ban. 2. Palacky [pä-läts'kē].

X.

1. Napoleon; in Italy. 2. Austria, Russia, Prussia, France, and England; affairs in the kingdom of Naples.

XI.

1. To Oporto. 2. Lamartine.

XII.

1. Balaklava. 2. Polish nationality was destroyed and the country divided into ten governments under Russian administration.

XIII.

1. Battle of Königgrätz. 2. In a conference of plenipotentiaries from the different governments; to an assembly chosen by universal suffrage, which held its meetings in Berlin in 1867.

XIV.

1. Solferino. 2. Garibaldi; hunters of the Alps.

XV.

1. Debreczin. 2. Kossuth.

XVI.

1. A majority of one. 2. Nineteen.

THE C. L. S. C. CLASSES.

1882-1902.

CLASS OF 1899.—"THE PATRIOTS."

"*Fidelity, Fraternity.*"

OFFICERS.

President—John C. Martin, New York, N. Y.

Vice Presidents—John A. Travis, Washington, D. C.; Charles Barnard, New York, N. Y.; Rev. Cyrus B. Hatch, Pa.; Frank G. Carpenter, Washington, D. C.; John Brown, Chicago, Ill.; Charles A. Carlisle, South Bend, Ind.; Edward Marsden, Alaska; William Ashton, Uxbridge, England; Miss Alice Haworth, Osaka, Japan; Miss Frances O.Wilson, Tientsin, China.

Secretary—Miss Isabelle T. Smart, Brielle, N. J.

Treasurer—John C. Whitford, Detroit, Mich.

Trustee—Miss M. A. Bortle, Mansfield, O.

CLASS EMBLEM—THE FLAG.

CLASS COLOR—BLUE.

CLASS FLOWER—THE FERN.

"IT is the reserve corps of an army which enables the leader to strike the decisive blow when the critical moment arrives. It is the heavy balance wheel of an engine which distributes the power equally and insures that steadiness of motion which prevents destructive shocks, overcoming resistance that would stop the piston unaided by the stored-up momentum. It is the knowledge, experience, and character, the mental and moral wealth, which you have accumulated during your whole life that measure your real power and influence to-day."

A CLASSMATE writes: "I am sorry to be so late in sending memoranda, but I have not been able to complete it before this. I have received my books for '98–99 and as I find them even more interesting than any which have come before, I should be almost sorry to graduate if I did not intend to keep up some of the special courses after graduation."

A FEW words from graduates of '98 will be interesting to members of '99 who are so soon to pass through a similar experience. "I have received the C. L. S. C. diploma and am much pleased. As I am now in my fifty-sixth year, and this is the first diploma I have ever received, it seems to me a matter of much interest that I have completed the course. My life has been varied and large, and I have mixed much with people, but my education has had to come by bits. This diploma is one of many bits."

ANOTHER graduate writes: "It has been a source of interest and benefit to me, although I have had to read on the train and burn the midnight gas to finish the course. It has left me a strong incentive for further reading and I wish for the movement thousands of additional readers."

IT is not too early for members of the Patriot Class to begin planning for the graduation. A great rally is expected at Chautauqua in '99 and those who cannot go to Chautauqua will, if possible, visit some local Chautauqua.

CLASS OF 1900.—"THE NINETEENTH CENTURY CLASS."

"Faith in the God of truth; hope for the unfolding centuries; charity toward all endeavor."

"Licht, Liebe, Leben."

OFFICERS.

President—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

Vice Presidents—Rev. John A. McKamy, Nashville, Tenn.; Rev. Duncan Cameron, N. Tonawanda, N.Y.; J. F. Hunt, Chautauqua, N. Y.; Morris A. Greene, Pittsburg, Pa.; Mrs. Mary H. Gardner, Kansas City, Mo.; Mrs. James H. Bentley, Ridley Park, Pa.

Secretary and Treasurer—Miss Mabel Campbell, 53 Younglove Ave., Cohoes, N. Y.

Trustee—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

CLASS EMBLEM—EVERGREEN.

CLASS COLOR—GRAY.

THE Class of 1900 are, as usual, very much alive in all class plans. The secretary reports the receipt of a letter from a classmate in Savannah, Ga., who asks to be put down for five dollars toward the furnishing of the class building, with more to come if needed. Each member of the Arbor Vitæ Circle of Cohoes, N. Y., is pledged to add fifty cents to the class treasury as the result of some special piece of work which is to enable them to earn the desired amount. In fact, this plan seems to have great possibilities for the class at large and we doubt not that next summer will bring an interesting array of "experiences" as members from near and from far send their contributions for the good cause.

THE subject of a pin for the Class of 1900 is under discussion by a committee appointed for this purpose and further developments will be awaited with interest.

ONE of the greatest difficulties which most active C. L. S. C. members encounter is the demand for ceaseless activity. Often self-imposed tasks rob us of our best chance for growth. Often the real duty is made more taxing than it need be or than is wise. Perhaps the following word to the wise from Hamerton's "Intellectual Life" will help some of us to a truer standard of life. "You are living a great deal too much like a star, and not enough like a human being. You do not hasten often, but you never rest, except when nature mercifully prostrates you in irresistible sleep. Like the stars and the sea in Matthew Arnold's poem, 'Self Dependence,' you do not ask surrounding things to yield you love, amusement, sympathy. The stars and the sea can do without these refreshments of the brain and heart, but you cannot. Rest is necessary to recruit your intellectual forces. . . . Let your rest be perfect in its season, like the rest of waters that are still. If you will have a model for your living take neither the stars, for they fly without ceasing, nor the ocean that ebbs and flows, but rather let your life be like that of the summer air, which has times of noble energy and times of perfect peace."

CLASS OF 1901.—"THE TWENTIETH CENTURY CLASS."

"Light, Love, Life."

OFFICERS.

President—Dr. W. S. Bainbridge, New York, N. Y.

Vice Presidents—William H. Mosely, New Haven, Conn.; Rev. George S. Duncan, Washington, D. C.; John Sinclair, New York, N. Y.; Mrs. Samuel George, Wellsville, W. Va.; Dr. Eliza Mosher, Ann Arbor, Mich.; Mrs. T. S. Coleman, San Antonio, Tex.; Mrs. Miller, Jacksonville, Fla.

Executive Committee—Mrs. Ned Arden Flood, Chicago, Ill.; Prof. Henry Cohn, Evanston, Ill.; Mrs. Jamison.

Secretary and Treasurer—Miss Harriet E. Barse, 1301 Brooklyn Ave., Kansas City, Mo.

CLASS FLOWER—COREOPSIS.

CLASS EMBLEM—THE PALM.

THE Twentieth Century Class is evidently feeling its responsibility by the way in which reports of the first year of work are coming into the office at Buffalo. The new year opens with new opportunities and every member of the class is reminded of his peculiar privilege, now one year nearer, of graduating in the first year of the new century.

> The time is great!
> What times are little? To the sentinel
> That hour is regal when he mounts on guard.

THAT the readings for '97–98 have been done by classmates under different conditions, yet with the same purpose, is happily illustrated by the following letters recently received. The first from Missouri: "In my very busy life, I have not found time to fill question blanks, yet I hope to do that later on. The readings were greatly enjoyed; filled a long-felt want of variety to an overburdened brain." The next from Illinois: "Enclosed find money order for the fee of a new member and for grading and returning memoranda, which I enclose. I am sorry to send my papers so late, but I am a farmer's daughter and have been an isolated reader thus far, and have found it difficult to secure time for filling out my memoranda. While I scarcely dare hope for the coveted 'eighty per cent' I do not regret the time and effort expended, for I know that I have gained much more than I should by doing the reading only."

CLASS OF 1902.—"THE ALTRURIANS."

"Not for self, but for all."

OFFICERS.

President—Dr. John Henry Barrows, Chicago, Ill.

Vice Presidents—Col. Geo. W. Bain, Lexington, Ky.; Mr. A. T. Van Laer, New York, N. Y.; Mr. J. T. Robert, Chicago, Ill.; Mr. M E. Baird, Ohio; Madame Emma D. Rupin, St. Louis, Mo.; Miss Harriet Walker, Wellesley College; Mr. Albert Watson, Mt. Vernon, Ill.; Miss Sallie Leonard, Jackson, Mich.; Miss Jewell Gould, Aspen, Col.; Miss Belle Kearney, Flora, Miss.

Honorable Vice Presidents—The Earl and Countess of Aberdeen.

Secretary—Mrs. Josephine Griffith Rabb, East Aurora, N. Y.

Treasurer—Prof. J. C. Armstrong, 530 Lincoln Ave., Pittsburg, Pa.

CLASS FLOWER—AMERICAN BEAUTY ROSE.

TO THE MEMBERS OF 1902:

Dear Classmates: — Two months of our first year of study have already slipped away. They find many of us abreast of our work, some a little behind, none, I trust, in the least discouraged, and all intent upon making the most of our four years' journey together. The "English Year" will be an inspiration to us if we read it aright. Let us strive for the wide horizon, the lofty point of view from which we may appreciate the really great things of life and lose sight of what is small and insignificant; so shall we find new courage for the daily duties which mold our characters and a new sense of the worthiness and dignity of this our human life as we struggle toward the divine ideal.

> In man's self arise
> August anticipations, symbols, types,
> Of a dim splendor, ever on before
> In that eternal circle life pursues.

Yours in the fellowship of the Class of 1902.

JOHN HENRY BARROWS, President.

WE are glad to announce that the name of Miss Belle Kearney of Flora, Miss., has been added to our list of vice-presidents. Miss Kearney spent some time in Chautauqua this summer and as our representative in the far Southland will carry with her the good wishes of the class.

THE Class of 1902, like every other C. L. S. C. class, reaches out into the most isolated parts of this country. Here is a prospective circle in California at Overton, a lumbering town of some five hundred inhabitants, containing a very intelligent population but out of reach of a railroad, their only communication with the outside world being by stage. Truly an ideal place for a circle, where no multiplicity of distractions can weaken their enthusiasm.

WE learn from Kansas that it is proposed at Junction City by the Teachers' Reading Course to use Professor Beers' "From Chaucer to Tennyson" as the required book for their current year's work. It is interesting in this connection to note how widely the Chautauqua books enter into the educational work of the country, being by no means confined to the Chautauqua Reading circles. In a large number of colleges, and even in the great universities, Chautauqua books may be found on the shelves of the libraries and in many cases as the required text-book for class work.

UNDER the *Local Circle Department* will be noted a large number of new circles. We give them all hearty greeting. It is pleasant to learn that the number is in excess of the number reported at this time a year ago by the new class.

GRADUATE CLASSES.

THE Class of '87 was as prominent as ever at the New England Chautauqua Sunday-school Assembly of 1898, its eleventh annual reunion being well attended, and the Pansies shining bright in all C.L.S.C. affairs. The class voted without dissenting voice that each member should, if possible, read some seal course during the year to show maintained interest in the C. L. S. C. and, barring a seal course, to read the regular books for the year. President Louie Erville Ware, who was reelected, was also elected a vice-president of the Society of the Hall in the Grove. At the annual meeting he announced the plan proposed for the Class of '87, and it was heartily approved by the S. H. G. and a number of classes agreed to follow it.

THE many readers of the Vesper Reading Courses of the C. L. S. C. will be glad to note the addition of new courses and a change of plan which will bring these into line with other C. L. S. C. seal courses. Full details will be found in one of the later pages of the magazine.

A NEW course in French history is announced to meet the demand on the part of graduate circles and other organizations for some preparation for the coming Paris Exposition. Even those who do not expect to visit the exposition in person will find France so much "in the air" that a renewal of their acquaintance with French history will not come amiss.

A NEW course in French literature is also among the announcements which will accompany the new edition of the C. L. S. C. Hand-Book, which may be secured by sending a two-cent stamp to John H. Vincent, Buffalo, N. Y.

MANY graduates are interested in helping to circulate the new Chautauqua booklet, which forms a most attractive little souvenir. A large number of these have been printed and any graduates who are willing to distribute them among persons who may thus be interested in Chautauqua are invited to send to the Buffalo office for as many as they need.

THE *Tribune* Sunshine Society column is under the charge of a C. L. S. C. graduate, Mrs. John C. Martin of New York, and any graduates or others who would like to send words of cheer, suggestions for plans of reading or of work for "shut-ins" will find that such greetings and helps are heartily appreciated. A letter to Mrs. Martin at No. 1 Broadway will bring a response, showing how Chautauquans can, through their C. L. S. C. experience, help this good cause.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God." *"Let us Keep our Heavenly Father in the Midst."*
"Never be Discouraged."

C. L. S. C. MEMORIAL DAYS.

OPENING DAY—October 1.
BRYANT DAY—November 3.
SPECIAL SUNDAY—November, second Sunday.
MILTON DAY—December 9.
COLLEGE DAY—January, last Thursday.
LANIER DAY—February 3.
SPECIAL SUNDAY—February, second Sunday.
LONGFELLOW DAY—February 27.
SHAKESPEARE DAY—April 23.
ADDISON DAY—May 1.
SPECIAL SUNDAY—May, second Sunday.
SPECIAL SUNDAY—July, second Sunday.
INAUGURATION DAY—August, first Saturday after first Tuesday.
ST. PAUL'S DAY—August, second Saturday after first Tuesday.
RECOGNITION DAY—August, third Wednesday after first Tuesday.

SPECIAL MEMORIAL DAYS FOR 1898–99.

ALFRED DAY—October 18.
CAVOUR DAY—November 15.
CROMWELL DAY—December 16.
GLADSTONE DAY—January 14.
DRYDEN DAY—February 18.
WORDSWORTH DAY—March 17.
SHELLEY DAY—April 20.
TENNYSON DAY—May 18.

NEWS FROM THE FIELD.

UNUSUAL activity seems to characterize the Chautauqua circles organizing for the English year. From the Pacific coast office the enrollment of new members the first of October was twice as large as last year. Among the old circles reorganizing are those at Santa Clara, San José, Battle Mountain, and Vallejo. The secretary of the latter circle, in apologizing for the delay in sending her report of the circle in June, says: "You may put it down to over-time, with italics. If you lived in a navy-yard town during the war you would understand that, as nearly every member of the circle worked in the navy-yard, or was connected in some way with the work, it affected us a good deal. From March until the latter part of August the hours of work here were from 8 a. m. until 10 p. m., including Sunday, although Sunday evening was free. You can easily see that there was no time for Chautauqua study. War is no fun for a navy-yard, I can assure you. I handled as many as two hundred and fifty telegrams a day outside of my other clerical work, and the workmen, of course, were laboring as hard as possible in the ships and shops, so we closed the circle in April; hence the scarcity of reports. We will try to do better this year."

THE Brooklyn Chautauqua Union held its opening meeting on the 20th of October in the Central Presbyterian Church. More than one thousand people were present, and the exercises were opened with the Chautauqua Vesper Service, at which Rev. Dr. R. S. Pardington, the former president of the union, presided. An address was also given by Rev. Dr. Carson and one by the Rev. Mr. Isaacs, chaplain of the battle-ship *Massachusetts*. Every one in the audience was supplied with a small flag and, as might be expected, enthusiasm ran high. Mr. Straley, the president of the union, presented the work of Chautauqua, and this opening rally promises to affect the work of the union favorably throughout the year.

MISS C. A. TEAL, of Brooklyn, who has rendered splendid service to the work in Brooklyn for many years, has been appointed district secretary for the borough of Manhattan. It is hoped that this new departure will result in a decided increase of the work in New York City.

NORTHERN New Jersey, under the leadership of its energetic secretary, Mr. George S. Lincks, is wide-awake as usual. Vesper Services were held in many churches during the month of October and the territory is fully kept alive to Chautauqua interests.

FROM the West the state secretaries are gathering in the results of the summer's activity. Mrs. L. B. Kellogg, the secretary for Kansas, spent some weeks of the summer at a new Assembly at Boulder, Col., where C. L. S. C. exercises were initiated with due ceremony and from which the Chautauqua spirit has been carried far into the Southland, a flourishing circle at Cameron, Texas, being one of the direct results.

MRS. SHIPLEY, state secretary of Iowa, writes of the interest widespread throughout the state, which, in regard to local Chautauqua Assemblies, is one of the most developed of any state in the Union.

SPECIAL attention is being given to the work in the South through the secretary of the Monteagle Assembly, Mr. A. P. Bourland, who is closely in touch with a wide constituency throughout the Southern States, and is, of course, deeply interested in the work of Chautauqua. Through his instrumentality and that also of the very efficient secretary of Tennessee, Miss Sallie C. Battaille, of Nashville, the Chautauqua work at Monteagle is in

a most flourishing condition and a new C. L. S. C. office is to be built by another year.

FOREIGN countries are contributing their share to the enrollment of the new class, one of the latest recruits being Count Teleki, of Budapest, Hungary, who has become interested in Chautauqua work through the report of the United States Bureau of Education.

NEW CIRCLES.

CANADA.—A competent organizer has been at work in Fort Coulonge, Quebec, and as a result sends the names of ten ladies who are ready to take up the course.

NEW HAMPSHIRE.—A trio of readers at Hudson Center have sent in their fees for the year.

MASSACHUSETTS.—The newly organized circle at Brockton have chosen the first and third Mondays of the month for the meetings and have secured the Central Methodist Church as a place of meeting. They have thirteen names now on the roll, and the energetic efforts of Rev. Kaufman will doubtless secure more.——New names are being added to the already large circle at Gloucester, and with a good management and an interested company a successful year is assured.——The Current History Short Course is receiving the attention of eleven ladies and gentlemen at Turner's Falls.

CONNECTICUT.—An organization of the C. L. S. C. has been effected in Sheffordville, five new members and one graduate making up the class.——There is a strong C. L. S. C. spirit among the ten new members at Wallingford.

NEW YORK.—The systematic study arranged for the C. L. S. C. appeals to the people of Watertown, where ten industrious people will carry out the plan of work.——The Class of 1902 welcomes a goodly number of newly enlisted readers from Dannemora.——Unionville and Erieville report organizations of the C. L. S. C. just completed.

NEW JERSEY.—The Current History Short Course, just the one for busy housekeepers, is to receive a trial from a half dozen ladies in Mount Holly.——A dozen enrollments for 1902 come from the new circle at Woodbury.

PENNSYLVANIA.—A fully officered circle of ten members has entered the ranks at Milton.——Girardville is the home of fourteen registered and three associate members.——Four membership fees are received from Philadelphia.——A company of eight at Allentown have started on the course with a determination which will carry them through the work of the four years.

SOUTH CAROLINA.—Well-equipped circles are reported from Walterboro and Chester.

OHIO.—The literary department of the Epworth League of the Franklin Avenue M. E. Church, Cleveland, is meeting with good success in organizing a C. L. S. C. for 1902.——The secretary of the new class in Youngstown writes: "We are progressing nicely, at present having a membership of about fifteen, with the prospect of having a large circle. We meet every Tuesday evening, from 8:00 to 9:30, at the home of Rev. George Anderson, pastor of the First Christian Church, who is the organizer."——A favorable beginning is made by the newly initiated readers at Rocky River.——The Home Circle of Troy is limited to twenty-two, the number now reached, all married and about the same age. There are lawyers, doctors, teachers, and other professional people in the organization.

ILLINOIS.—An organization of the C. L. S. C. in Chicago at first limited its number to twenty-four, but was obliged to open its doors to an unlimited number on account of the demand for the work. A successful year is expected.——A trio of readers report from Galesburg.

MICHIGAN.—A Juvenile Reading Circle in Big Rapids, which has read the course for four years, is ready to join with the C. L. S. C.'s in their study of the English course.

MINNESOTA.—A band of intellectual people in Minneapolis, who have read the course in part but dropped it in 1895, have decided to revive the circle and will make an effort to arouse Chautauqua enthusiasm among their friends.——A great deal of interest has been displayed among the eleven determined members at Blooming Prairie.

SOUTH DAKOTA.—In the Indian school at Pine Ridge a circle has been organized among the white and Indian employees.

MONTANA.—A member of the Class of '84 has begun the organization of a class at Fort Shaw.

WASHINGTON.—From Spokane comes a report containing fourteen names.——Seattle also reports a first-class organization.

OLD CIRCLES.

WEST INDIES.—A letter from Jamaica shows the second year of the circle there as well begun, with a constantly awakening interest.

MASSACHUSETTS.—Keep Pace Circle at Waltham and West Newton still holds its own as a loyal and energetic organization.——Three ladies from Hull will be among the graduates in '99.

NEW YORK.—One of the oldest and most prosperous organizations of the C. L. S. C. is the Syracuse Alumni Association. Their first meeting for this year was held in October, when officers were elected and a place of meeting agreed upon, the rooms of the Woman's Christian Association.——A circle of from twelve to twenty-five members, in Little Falls, has been doing excellent work for several years. They sent Miss Lula Miller as a delegate to Chautauqua this summer and at a special meeting, held recently, she read her report

This paper was well written and delightfully entertaining, describing the public buildings, the streets, the entertainments, the C. L. S. C. meetings and class buildings, and everything which interests the Chautauqua visitor. We regret that lack of space prevents the publication of this excellent report. —— The following is from the circle at Ithaca: "Our circle 'The Forest City Circle,' is composed of six members, all of whom are women. At first we held our meetings each week in the parlors of the Y. M. C. A., but later it was found more convenient to meet at the homes of the members. This proved to be much pleasanter and more enjoyable to all. The credit system has proved of great interest, that being the only way we, as a circle, had of raising money. Each time a member was absent a fine of one cent was required. Our treasury now has the sum of sixty-five cents, after having held thirty-four meetings, so you see the circle has been very well attended. Our last regular meeting was held on Tuesday evening, May 24, at Mrs. Moler's, No. 106 University Avenue. The meeting was opened at 8 p. m. We had very interesting pictures, brought from Germany by Miss Nellie Reed, which were greatly enjoyed by all. 'Shepp's Photographs of the World' and 'The Cathedral Churches of England and Wales' (loaned to us from the Cornell University library) were in the circle to be consulted. A paper on Melrose Abbey was read by Mrs. Moler and 'The Prisoner of Chillon' was given by Mrs. Robert McClenathen. We expect to reorganize in the fall of '98 and hope to add more members to our circle."

PENNSYLVANIA. — The proficient secretary of Merion Square Circle, Gladwyne, says concerning their work: "The interest that was at first manifested in our circle still continues unabated. We have enjoyed the course very much, and have, when possible, followed the program in THE CHAUTAUQUAN. Each member has always been willing to help when asked. We are looking forward to the coming autumn, when we will begin our next course with pleasant anticipations."—— "Liberty and Law" is the motto of the Lafayettes at Uniontown. They belong to the Class of 1900 and, although not so strong in numbers as formerly, they are doing better work.—— The *County Journal* of Coudersport reports the closing reception of the Alleghanians as one of which the circle should well be proud. The graduating class numbered twenty-two, and the alumni were their guests. The home of Mrs. Mary Larrabee was opened for the occasion, and "on entering the parlors the impression was that Uncle Sam had been robbed of all his stars and stripes for this occasion." Long tables were arranged through the center of the parlors for the graduates and smaller tables were grouped around them for the guests. When the others were seated, the graduates marched in to their places and all were served with ice cream and cake. The places at table were marked by name cards, and with these were programs, to each of which was tied the class flower, the violet. The toasts were excellent and the class poem was a most pleasing feature.

NEW ENGLAND ASSEMBLY.

The New England Assembly was held at Montwait, Mass., from July 18 to 29, and was most successful. Dr. Dunning as leader of instruction was very acceptable. His teaching awakened thought, prompted questions, and was thoroughly enjoyed.

The lecture platform was well sustained. Rev. Russell Conwell, D.D., Rev. George C. Larimer, D. D., Rev. Egerton R. Young, D. D., Rev. Roland D. Grant, D.D., Commander Booth-Tucker, and Leland T. Powers were among those who provided entertainment, profit, and pleasure.

The Recognition Day exercises were prepared with much enthusiasm by the members of the class who were present, but a pouring rain prevented the full program. Still every one listened with great pleasure to the eloquent words of Rev. Robert S. MacArthur, D.D., and all were well repaid for their efforts in decorations, etc., by the enthusiasm of all C. L. S. C.'s. Dr. Dunning presented the diplomas. In the evening a large banquet was held, where songs and speeches, wise, witty, and grave, were enjoyed, a fitting supplement to Recognition Day.

The music of the Assembly was led by Prof. Charles E. Boyd, assisted by a quartet, pianist, and large chorus. Under this leader many delightful concerts were enjoyed. The Assembly was also entertained each day by music from Marcknsick's Instrumental Concert Company of Boston. They were untiring in their efforts to please.

Prof. George W. Pease was instructor in the Sunday-school Normal Department, Prof. George J. D. Currie in physical culture, elocution, and primary Sunday-school, Miss Ada Kinsman in intermediate Sunday-school work, and Mr. Alfred Noan in temperance.

The program was well carried out, the managers carefully attending to every detail, and securing satisfactory comfort and pleasure to the large assembly.

The C. L. S. C. work was a pronounced success. More than three times as many joined the Class of 1902 as were enrolled the year before, and many old Chautauquans resolved to study for seals. The Class of 1902 has many choice students in its ranks, and the outlook for the C. L. S. C. in New England is promising.

TALK ABOUT BOOKS.

AS the holiday season approaches the various publishing houses of the country are sending out many handsome volumes which the Christmas shopper will hail with delight. There are books of every description, from the dainty, inexpensive booklet to the large magnificent work representing the efforts of the famous author and artist. This department of THE CHAUTAUQUAN aims to give its readers a comprehensive survey of what author, artist, and publisher are doing to promote the cause of universal education and culture.

From Bunyan's "The Pilgrim's Progress."

Copyright, 1898, by The Century Co.

VIEWING THE DELECTABLE MOUNTAINS.

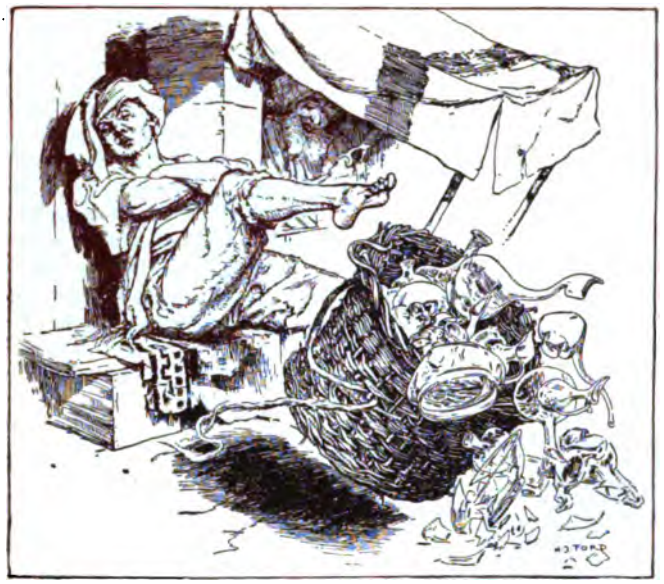
Of the many editions of "The Pilgrim's Progress"* none excel in beauty and nicety of execution the one which has just come from the De Vinne Press. It is elaborately illustrated by the well-known artists G. Woolliscroft Rhead and Frederick Rhead of England, and Louis Rhead of America, and the numerous small pictures scattered through the text, as well as the full-page illustrations, are artistic and sympathetic interpretations of Bunyan's work. The text and illustrations are done in sepia, and each page bears a handsome decorative border in green and white, into the design of which floral forms have been skilfully wrought. The typography is also of the best, and the readers of this great allegory will take great delight in the rich color effects, the graceful designs, and the mechanical work, which are effective and sumptuous.

The hurtfulness of misdirected charity is the central thought of Henry Seton Merriman's new novel, "Roden's Corner."* A fashionable set of London become the ready dupes of a designing business man and chemist and, in the belief that they are relieving the malgamite workers by establishing them in works where malgamite is made by a harmless process, furnish the means to effect a gigantic combination in the industry. As a result a panic in the paper trade is precipitated and the directors of the charity learn at length that the promoters of the enterprise, Roden and Von Holzen, are reaping enormous profits from a process of manufacture more deadly than the one in use before the charity was organized. Tony Cornish, one of the directors, rises to the emergency and after a struggle, in which he is handicapped by being in love with Roden's sister, succeeds in making an end of the business. He is aided in this by the opportune drowning of Von Holzen, who accidentally plunges into the canal while attempting to murder Cornish. The story has life and action and considerable philosophy of life expressed in epigrammatic sentences.

The reputation won by Messrs. L. Prang & Co. as publishers of a high grade of art productions is fully sustained by this year's output of souvenirs for the holiday season. The list of their publications contains dainty booklets, beautiful cards, and elegant calendars ornamented with exquisite designs in which

* The Pilgrim's Progress. By John Bunyan. Illustrated by the Brothers Rhead. Trade Edition, $1.50. *Edition de Luxe*, $5.00. New York: The Century Company.

* Roden's Corner. By Henry Seton Merriman. With illustrations by T. de Thulstrup. 324 pp. $1.75. New York: Harper & Brothers.



From Andrew Lang's "The Arabian Nights." Copyright, 1898, by Longmans, Green, & Co.

ALNASCHAR KICKS OVER THE BASKET.

graceful floral forms and charming figures are artistically combined. Bright verses and appropriate sentiments grace these handsome productions, whose excellence is unsurpassed, and the most refined taste will be pleased with the delicate coloring as well as the general utility of these art productions.* The designing, the chromo-lithographic work, and the printing are products of American art, and they show a wonderful progress in this branch of artistic ornamentation.

In the third series of "The World Beautiful,"† by Lilian Whiting, the relation of the "world of the unseen" with that of the seen as revealed by psychic research is the subject discussed. These two worlds, she says, so interpenetrate each other that it is possible for the inhabitants of the latter to communicate with those of the former. But before this is possible the dweller in the "seen realm" must attain by an evolutionary process a certain spiritual condition, which depends on his own nature and on his constant "adherence to the higher needs of the spirit," that is, the supremacy of the spiritual over the physical. The possibility of communicating with spirits of the unseen realm is illustrated by many interesting examples of the working of the planchette, taken from Miss Kate Field's record of experiments. She further states that this power to communicate with the unseen realm, a power productive no doubt of much happiness, is not the only result of a high degree of spirituality; it enables one to rise above the sordid cares and petty meannesses of this world and to live the ideal higher life, in which state the spiritual laws, the laws governing the unseen realm, are easily understood. Though every reader cannot subscribe to all that the author has to say, he will find in these pages many beautiful and inspiring thoughts expressed in a bright, attractive manner, and he will be the better for having read them.

Mr. Andrew Lang has made a valuable addition to his long list of delightful books for children in a carefully selected and edited compilation of "The Arabian Nights Entertainments."* Only the best of the stories appear, translated from the admirable French version of M. Galland, and in all cases the portions which made the original book unfitted for young readers have been eliminated. The illustrative work has been admirably done by Mr. H. J. Ford, and the covers are very tastefully and attractively gotten up in blue and gold. The book cannot fail to awaken as much pleasure in the child-heart as its Fairy Book predecessors, and children of a larger growth, who, with Mr. Lang, read the wonderful stories "in dirty old volumes of small type with no pictures," will recognize the service he has rendered the present generation of little people.

Mr. George Laurence Gomme is to be congratulated upon the conception and successful execution of a new idea in books for young readers. In "The King's Story Book"† he has presented thirty-six selections from English romantic literature illustrative of events in the reigns of English monarchs from Harold to William IV., such masters as Scott, Dickens, Thackeray, Kingsley, and even Shakespeare being represented. "The Queen's Story Book" contains twenty-eight similar selections, illustrating as many reigns from the Conquest to Victoria, the central figure in a majority of them being a woman. These selections have been chosen with great skill and changed but slightly to form complete stories. While the author's primary

* Prang's Sumptuous Calendars, Art Books, and Christmas Cards. Prices from 5 cents to $3.00. Boston and Springfield: Taber-Prang Art Company.

† The World Beautiful. Third Series. By Lilian Whiting. 245 pp. $1.00. Boston: Little, Brown & Co.

* The Arabian Nights Entertainments. Selected and edited by Andrew Lang. Illustrated. 424 pp. $2.00.——† The King's Story Book. Edited with an introduction by George Laurence Gomme. Illustrated by Harrison Miller. 527 pp. $2.00.——The Queen's Story Book. Edited with an introduction by George Laurence Gomme. Illustrated by W. H. Robinson. 446 pp. $2.00. New York: Longmans, Green, & Co.

object is to amuse, he has maintained a high standard of excellence both in his choice of stories and the form of their narration. The idea is an admirable one, accomplishing three important objects: furnishing good, wholesome reading, inculcating a love for history, and introducing the young mind to the best forms of literature. Both volumes are attractively bound and illustrated and will make very appropriate holiday gifts.

No one knows better the inmost thoughts and feelings of the soldier than his chaplain, and long service in that capacity during the Civil War has enabled H. Clay Trumbull to write understandingly and sympathetically of the most tender and sacred side of soldier life. In his "War Memories of an Army Chaplain"* he affectionately portrays the real soldier, his patience and cheerfulness, his bravery and loyalty, his thoughtfulness for his comrades, and withal his tender yearning for the loved ones at home. As a friend and counselor quainted with many officers of both the army and navy, of whom he has many anecdotes to relate. After the close of the war he enjoyed the friendship of General Grant, and one of the best chapters of the book is devoted to glimpses of the hero of the Civil War. The book is tastefully bound in cadet blue cloth and illustrated with hand-finished half-tone engravings and photogravure frontispiece.

The lover of the esthetic in book-making will find his taste gratified in the holiday edition of "Fishin' Jimmy,"* just published by the Scribners'. Annie Trumbull Slosson's touching story of the New England fisherman has been given a charming setting. Printed in old style type on antique deckle-edge paper, with wide margins, gilt top, six full-page photogravures on embossed panels, and eleven smaller photogravures, and bound in dark green satin-finish cloth with white back and gilt trimmings it is evident that the book-maker's art could go little farther. The illustrations are by

From H. Clay Trumbull's "War Memories of an Army Chaplain."

Copyright, 1898, by Charles Scribner's Sons.

"THE FIRING PARTY TOOK POSITION IN FRONT OF HIM A DOZEN PACES DISTANT."

Chaplain Trumbull was with his men in camp, on the battlefield, in the hospital, and in prison, and his varied experiences are told with many touches of humor and pathos. He was personally ac-

Alice Barber Stephens, and all in all a more alluring book is hard to be imagined.

Another delightful nature book by Mabel Osgood Wright has been issued in readiness for the holiday

* War Memories of an Army Chaplain. By H. Clay Trumbull. 421 pp. $2.00. New York: Charles Scribner's Sons.

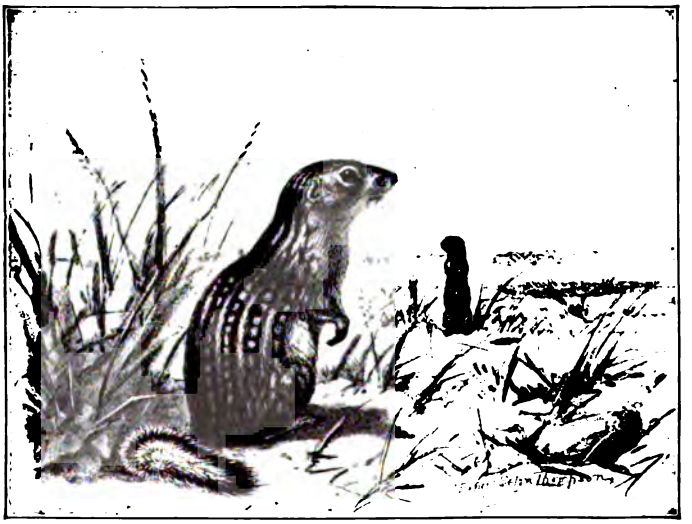
* Fishin' Jimmy. By Annie Trumbull Slosson. Illustrated. 66 pp. $3.00. New York: Charles Scribner's Sons.

season. It is safe to say that no other writer presents the subject of bird and animal life more attractively and intelligently than Mrs. Wright, and "Four-footed Americans and Their Kin"* is sure of a large and loving public. The facts about our common animals and their wild relations which are woven into the charming stories are just what every American child should know, and they can never learn them in more entertaining fashion. A valuable feature of the book is the beautiful illustrations by Ernest Seton Thompson, representing about seventy-five varieties of "four-footed Americans."

From S. Weir Mitchell's "The Adventures of François." Copyright, 1898, by The Century Co.

FRANÇOIS AND TOTO IN THE LUXEMBOURG.

An attractive addition has been made to the literature on the Philippine Islands by Dean C. Worcester, assistant professor of zoology in the University of Michigan, who in 1887 accompanied a party of zoologists to the Philippines and visited fifteen of the islands during the eleven months of his stay. In 1890 Professor Worcester, with Dr. Frank S. Bourns, who is now on Commander Dewey's staff, returned to the islands, remaining nearly three years and including twenty of the islands in their explorations. It is mainly the experiences of this trip that Professor Worcester recounts in a simple style, and his descriptions of the islands and the people inhabiting them are extremely interesting. The first chapter consists of a brief history of the country, and an appendix contains succinct information about its natural resources. Numerous photographs of typical scenes and groups are scattered through the book, and an excellent map and exhaustive index add to the value of the volume.*



From Mabel Osgood Wright's "Four-footed Americans and Their Kin." Copyright, 1898, by The Macmillan Company.

STRIPED SPERMOPHILE.

The skill of the literary artist is as discernible in the recent product of Dr. S. Weir Mitchell's pen as in "Hugh Wynne." From the revolutionary period of American history the author has turned to the most stormy era in the national development of France, sketching in delicate yet distinct lines the social turbulence of the time. The adventures of a unique character form the background of the picture,

*Four-footed Americans and Their Kin. By Mabel Osgood Wright. Edited by Frank M. Chapman. Illustrated by Ernest Seton Thompson. 432 pp. $1.50. New York: The Macmillan Company.

*The Philippine Islands and Their People. By Dean C. Worcester. Illustrated. 529 pp. $4.00. New York: The Macmillan Company.

and around him are grouped several prominent historical figures of the period and other characters whose acts are in harmony with the spirit of the time. This central figure is François, the foundling, when he is first exhibited in 1777, and a most engaging lad he is, with his perpetual gaiety and odd countenance. But the scene changes and he becomes in succession a thief, one of the gentlemanly sort who never does any violence, a juggler, and a fencing master, and with each change we obtain a glimpse of a new phase of the social disorder. In all of François' adventures — and they are numerous as well as exciting—in and around Paris and in Normandy we are impressed with his sagacity, shrewdness, and perpetual good nature. Though François is the chief actor the other personages are by no means dummies. There are jailers, commissioners, other infamous officials and the nobility, who are equally well portrayed. The character sketching is forceful and vivid, but not more so than the delineation of the events, in which the dramatic element largely enters. Particularly realistic are the prison scene and the episode of the Catacombs. The artist, André Castaigne, has produced effective illustrations for "The Adventures of François."*

The new holiday edition of the well-known story by Lew Wallace, "The Fair God,"† just issued from the Riverside Press, is a delight to the eye and very satisfying to the esthetic nature. A mere enumeration of the illustrations—forty full-page photogravures, about one hundred and fifty headpieces and rubricated initials, besides numerous tailpieces—gives scarcely an idea of the magnificence of the book. The real value of this department of the work consists not merely in the artistic excellence of the pictures but also in their archeological value. Many of them reproduce the architectural, decorative, sculptural, and ceramic arts and the manners and customs of the period covered by the story, and others represent the thrilling incidents of the Mexican conquest with a verve and force equal to that of the story itself. It is unusual for an artist to incorporate so much into illustrative work and we are informed that only after a careful and critical study in the museums of America and Mexico and an investigation of the remains of Aztec civilization

From Lew Wallace's "The Fair God."

Copyright, 1898, by Houghton, Mifflin and Co.

"OVER THE BRIDGES THE HORSEMEN GALLOPED."

*The Adventures of François. By S. Weir Mitchell, M.D. 321 pp. $1.50. New York: The Century Co.

†The Fair God. A Tale of the Conquest of Mexico. By Lew Wallace. Illustrated by Eric Pape. Two vols. 374+466 pp. Boston and New York: Houghton, Mifflin & Co.

at the scenes of the story's action, has the present artist, Eric Pape, been able to accomplish this happy result. Then for the reader's information the significance of the ornamental work in initials, headpieces, and tailpieces is fully explained in the twenty pages occupied by the list of illustrations. In typography, too, the work is all that can be desired, and a fine quality of paper has been used for this edition, which is in two volumes. The story itself, one of the most remarkable historical tales ever written, is too well known to need any comment beyond the fact that its sale has reached nearly 150,000 copies.

"A Child's History of England,"* by Charles Dickens, is so well known to the reading world that any remarks upon the author's graphic narrative style or the adaptability of the book to the tastes of youthful readers would be superfluous. The distinctive features of the present edition are the character and the number of the illustrations. In a prefatorial note the artist, Mr. Clifton Johnson, explains that he has devoted three summers to the study of the scenes of the historic events delineated by the author and the results as exhibited in the reproductions are all very pleasing and effective. Battlefields, historic buildings, and monuments, in Great Britain, Ireland, and France, as they appear today make up the full-page illustrations—nearly fifty in number—and all show the artist's keen appreciation of artistic scenic effects. In mechanical structure this edition is pleasing to the book-lover. The textual part is printed on a good quality of paper, in clear type, and the covers of blue cloth bear an appropriate design.

From Cy Warman's "The Story of the Railroad." Copyright, 1898, by D. Appleton & Company.

THE ENGINEER.

There is no branch of engineering more important to the development of a new territory than that pertaining to the construction of a railroad, and in the great West particularly the history of the railroad and of the country's development are inseparable. This fact is made strikingly evident in Cy Warman's "Story of the Railroad,"* as is also the fact that the railroad pioneers had to fight for every inch of territory they secured. The whole enterprise of railroad construction west of the Mississippi River was a struggle from the start. The organization of a company, the solution of the question of capital, obtaining the right of way, fixing the grade, and the actual work of construction involved difficulties, perils, and tragedies unimagined by the traveler who now enjoys the result of the labor. The fights with Indians, wars with rival companies, occasional trouble with the laborers, the methods of land agents, and life in a camp of graders are some of the events which the author has vividly described. This tale, one of the "Stories of the West" series, is full of incident, entertaining, and

* A Child's History of England. By Charles Dickens. With illustrations and photographs by Clifton Johnson. 415 pp. $2.50. Boston and New York: Houghton, Mifflin and Co.

* The Story of the Railroad. By Cy Warman. Illustrated. 298 pp. $1.50. New York: D. Appleton & Company.

From James D. Richardson's "Messages and Papers of the Presidents." Copyright, 1897, by James D. Richardson.

ABRAHAM LINCOLN.

historically valuable. The volume contains illustrations which give an idea of the picturesqueness of western scenery as well as the difficulties the engineer had to meet.

By the authority of Congress a publication* of great historical value has been issued under the editorship of Hon. James D. Richardson, a representative of Tennessee. According to a resolution passed by Congress this work contains "all the annual, special, and veto messages, proclamations, and inaugural addresses of the presidents of the United States from 1789 to 1897." The editor has spared no pains to make this an authentic historical work, a careful investigation of the original government records at Washington having been made. The illustrations are engravings from plates owned by the government and they include portraits of the presidents and pictures of the government buildings and copies of celebrated paintings. The first volume of the new edition of this work gives a record of the first four administrations and contains copies of the Constitution of the United States, the Articles of Confederation, and the Declaration of Independence. In general appearance it is an admirable example of what mechanical skill can accomplish in the book-maker's industry.

In the production of a volume called "Turrets, Towers, and Temples," the editor, Esther Singleton, has successfully executed a novel idea, the utility of which is easily discerned. This book is a compilation consisting of selections from the works of famous writers, which describe some of the great masterpieces of architecture. From the writings of English, German, and French authors the compiler has gathered many literary gems which give an idea both of the author's literary style and the architectural beauty of the structure he describes. The artist has added pictorial reproductions of the buildings, which constitute a very pleasing feature of the volume.* The handsome covers of green and gold are attractively ornamented.

There is a growing interest in art in this country, particularly in the branch of sacred art which deals with incidents in the life of Christ. The general student has been handicapped by the lack of a short, comprehensive work on the subject, and he will therefore welcome Estelle M. Hurll's book presenting this phase of art history. The author having done editorial work in the revision of Mrs. Jameson's "Sacred and Legendary Art," and having access to great stores of art information not available to the general public, is well prepared to produce a work of this nature. The general plan of the book is one which combines simplicity, brevity,

From Esther Singleton's "Turrets, Towers, and Temples." Copyright, 1898, by Dodd, Mead and Company.

THE DUCAL PALACE.

* A Compilation of the Messages and Papers of the Presidents, 1789–1897. By James D. Richardson. Vol. I. 586 pp. Department L, Washington, D. C.: Ainsworth R. Spofford, General Secretary.

* Turrets, Towers, and Temples. The Great Buildings of the World, as Seen and Described by Famous Writers. Edited and translated by Esther Singleton. With numerous illustrations. 329 pp. New York: Dodd, Mead and Company.

and comprehensiveness. The introduction is a brief historical account of the evolution of Christian art from the simple cycles in the primitive period to the elaborate productions of modern painters, with an enumeration of some of the most important series of representations pertaining to the life of John the Baptist. Then follows the descriptive history of the art productions representing particular incidents in the life of Christ. In treating these subjects the author has wisely followed the chronological order of their occurrence, and after giving the biblical record of the event there follows an account of the beginning and the development of its use as an art subject, opinions as to its adaptability to the purpose, and a brief description of the pictures illustrating it. The writer also gives valuable criticisms and explanations which assist the reader in forming a just and appreciative idea of the artist's work. Almost every subject is illustrated in a text-drawing or a full-page half-tone—in all about a hundred—and some of the best work of famous artists both ancient and modern is represented. A handsome binding, clear type, and an excellent quality of paper are also attractive features of the work.*

From Francis Parkman's "La Salle and the Discovery of the Great West."

Copyright, 1897, by Little, Brown and Company.

FATHER HENNEPIN CELEBRATING MASS.

An example of what may be accomplished by an indomitable purpose which overcomes all obstacles may be seen in the works of Francis Parkman.† In spite of ill health he made a careful research of the sources of historical information, and his familiarity with the subject studied, coupled with a brilliant literary style, gives his work a charm rarely excelled. In "Pioneers of France in the New World" there is a vivid picture of the attempts made by the French to colonize Florida and a graphic account of the adventures of Champlain and other French explorers who traveled about in the North. "The Jesuits in North America in the Seventeenth Century" is the second volume of the series, treating of the French influence in America. All the difficulties of these French missionaries, their successes and their failures, and the awful tragedies enacted in the history of New France the author has made intensely realistic. A new library edition of these works has been issued, containing maps, a frontispiece, and a very complete index, and the text used includes the author's latest revisions. The volumes are substantially bound in green cloth.

Greenland, the land of snow and ice, is the coun-

*The Life of our Lord in Art. With some Account of the Artistic Treatment of the Life of St. John the Baptist. By Estelle M. Hurll, editor of Mrs. Jameson's "Sacred and Legendary Art." 392 pp. $3.00. Boston and New York: Houghton, Mifflin and Co.

† Pioneers of France in the New World. By Francis Parkman. 518 pp. $2.00.——The Jesuits in North America in the Seventeenth Century. By Francis Parkman. 603 pp. $2.00. Boston: Little, Brown & Co.

try which Lieutenant Peary made the objective point of his life-work, and since his return from the several exploring expeditions conducted by himself information concerning that northern country has assumed a more positive character. His account* of its size surprises us and we are more astonished yet to learn that the interior, with the exception of a narrow strip from five to twenty-five miles wide, is an ice plateau, without mountain or valley, from five to ten thousand feet above the sea level. It was across this great ice expanse that Lieutenant Peary made his sledge trips, which were as full of dangerous and exciting experiences as were the boat trips. His delineation of these, which is simple and graphic, forms but a small portion of the record of his experiences and of the work accomplished. He has fully set forth the difficulties overcome before the execution of his plans was possible, given an admirable idea of the extensive preparation made for the expeditions, and carefully explained the methods by which he secured information especially valuable to the scientist. Facts pertaining to the flora and fauna of the country and to the habits and customs of the people are included among the interesting things the author has written. Another delightful feature of the two volumes is the illustrative work. Something like eight hundred illustrations are scattered through the two volumes, and the necessary maps and diagrams are inserted in their proper places. The text is printed in large, clear type on heavy paper and the volumes are encased in handsome blue covers.

From Robert E. Peary's "Northward Over the 'Great Ice.'"

Copyright, 1898, by Frederick A. Stokes Company.

GREENLAND SMALL BOY.

There are many who need to learn that it is not chance but persevering effort that brings success to people. Orison Swett Marden in "The Secret of Achievement"† teaches this and much more. He shows that honesty, attention to trifles, self-control, purity, good health, and decision are characteristics to be cultivated, without which real success cannot be achieved. There are also excellent lessons to be learned from the chapters on habit, morality, beneficial results of labor, "Being and Seeming," and "The School of Life." The author has illustrated his statements by hundreds of interesting and inspiring incidents, many of them about well-known people, which stimulate the reader to greater efforts in laying the foundation of a noble character. Several portraits of successful people constitute the illustrations.

The method which Ferdinand Brunetière employs in his work on French literature is one which commends itself to students. He explains in the prefatory remarks that he has drawn a lesson in classification from the scientist, and instead of making the different literary periods correspond with the centuries, he has taken into consideration distinct occurrences which have had an influence on the development of French literature and on these events based his divisions of literary periods. Consequently the first divisions of French literature are the Middle Ages, the Classic Age, and modern times, and each of these are subdivided into periods of shorter duration. In a clear, cogent way he has shown how French literature has grown from the simple, inconsequent works of the early centuries to the great literature of the present, giving special attention to the causes of transition from one period to another. A very complete bibliography of the subjects treated, including authors and their works, forms the foot-notes throughout the text.* The illustrations, numbering more than a dozen, are portraits of French writers.

Few men have had such opportunities for studying English life of the present century as George W. E. Russell. Enjoying a wide acquaintance with notable people and with elderly men and women who knew the celebrities of the preceding generation, he has been able to go back in his own

* Northward Over the "Great Ice." By Robert E. Peary. With maps, diagrams, and about eight hundred illustrations. Two vols. 601 + 639 pp. New York: Frederick A. Stokes Company.

† The Secret of Achievement. By Orison Swett Marden. Illustrated with portraits of eminent persons. 378 pp. $1.50. New York: Thomas Y. Crowell & Company.

* Manual of the History of French Literature. By Ferdinand Brunetière. Authorized translation by Ralph Derechef. 596 pp. $2.00. New York: Thomas Y. Crowell & Company.

and his friends' memories to the beginning of the century, and in his "Collections and Recollections"* now presents to the public in book form a fund of interesting information concerning the men and women of the century and the trend of social life. The book is necessarily gossipy and anecdotal, and Mr. Russell understands the difficult art of story-telling. His comparison of the England of to-day with that of 1800 is highly instructive, as well as thoroughly optimistic. The book is a crown octavo, bound in ornamental cloth, with deckle edges and gilt top.

"Hawaii and a Revolution"† is the title of a volume written by Mary H. Krout, a journalist representing a Chicago newspaper during the governmental crisis of 1893. The record of her experiences includes a spirited recital of the difficulties overcome before setting sail from San Francisco, a most interesting account of historical events in Hawaii, together with descriptions of the country and of the manners and customs of the people. A trip to New Zealand and Australia was a pleasant diversion which she has also described. The author's style is delightfully fresh and racy and into the narrative she has incorporated that which most interests the reader. The illustrations are excellent and increase the value of the volume.

"Twenty Years After"‡ has been added to the Luxembourg series of fictional masterpieces. It is a translation of the latest French edition, and in rendering it into English the author's vivacity and force have been preserved. A few opening pages explain the political situation in France about the middle of the seventeenth century, the time of the opening of the story. Mazarin has succeeded Richelieu and the war of the Fronde is about to be precipitated. The political intrigue and the revolutionary movements of that period form the background of a plot in which D'Artagnan, Aramis, Porthos, and Athos are again important actors, as they were in the first of Dumas' famous trilogy. In make-up this volume has the distinctive features of this series of literary classics. It is provided with a photogravure frontispiece and title-page, and the text is amply illustrated with pictures bearing the signature of Frank T. Merrill. The text is printed on fine paper in clear type, and the volume is substantially bound in artistic covers.

Since the publication of Sienkiewicz's story of Rome in Nero's time many short tales bearing his signature have been given to the reading world. A new volume has "Sielanka"* for the title story. It is a forest idyl, simple and pure, which shows the author's skill in graphic delineation. Sienkiewicz's short stories, no less than his long ones, have a spirit, freshness, and power which captivate the reader. The present volume contains seventeen short tales, sketches, and dramatic works, which are published for the first time in the uniform Library Edition.

From Alexander Dumas' "Twenty Years After." Copyright, 1898, by T. Y. Crowell & Co.

"D'ARTAGNAN TOOK THE LETTER AND PUT HIS HAND TO HIS HAT."

For a fuller announcement of books and a more complete description of fall and winter literature see pages 181–216 of the present number of THE CHAUTAUQUAN.

---

* Collections and Recollections. By One Who Has Kept a Diary. 375 pp. $2.50. New York: Harper and Brothers.

† Hawaii and a Revolution. By Mary H. Krout. 344 pp. $2.00. New York: Dodd, Mead and Company.

‡ Twenty Years After. By Alexander Dumas. Translated from the latest French edition. 798 pp. $1.50. New York: Thomas Y. Crowell & Company.

* Sielanka: A Forest Picture, and Other Stories. By Henryk Sienkiewicz. Authorized unabridged translation from the Polish by Jeremiah Curtin. 592 pp $2.00. Boston: Little, Brown and Company.

THE ...UARY, 1899. Vol. XXVIII No. 4.

A WONDERFUL ...UQUAN

BEECHAM'S PILLS

For Bilious and Nervous disorders such as Wind and Pain in the Stomach, Sick Headache, Giddiness, Fullness after meals, Dizziness and Drowsiness, Cold Chills, Flushings of Heart, Loss of Appetite, Shortness of Breath, Costiveness, Blotches on the Skin, Disturbed Sleep, Frightful Dreams, and all Nervous and Trembling Sensations, etc., when these symptoms are caused by constipation, as most of them are. **The first dose will give relief in twenty minutes.**

This is no fiction. Every sufferer is earnestly invited to try one box of these Pills, and **they will be acknowledged to be a wonderful medicine.** **BEECHAM'S PILLS,** taken as directed, will quickly restore women to complete health. They promptly remove obstructions or irregularities of the system.

For a Weak Stomach, Impaired Digestion, Disordered Liver, Sick Headache, Female Ailments

they act like magic—a few doses will work wonders upon the vital organs: strengthening the muscular system, restoring the long-lost complexion, bringing back the keen edge of appetite, and arousing with the **Rosebud of Health the whole physical energy** of the human frame. These are facts admitted by thousands in all classes of society, and one of the best guarantees to the Nervous and Debilitated is that **Beecham's Pills have the largest sale of any Patent Medicine in the World.** 25 cents at Drug Stores.

Without a Rival. Annual Sales Over 6,000,000 Boxes.

and his friends' memories to the beginning of the century, and in his "Collections and Recollections" now presents to the public in book form a fund interesting information concerning the mo women of the century and the trend of The book is necessarily gossipy and Mr. Russell understands the diffi telling. His comparison of th with that of 1800 is highly i thoroughly optimistic. octavo, bound in or edges and gilt top.

"Hawaii and volume represe ernm enc ove mos Ha and trip div a t

AL BAKING POWDER
because it gives them the best results in baking

IVORY SOAP

Makes a profuse rich lather. A favorite soap for shaving.

"A PERFECT FOOD—as Wholesome as it is Delicious."

Walter Baker & Co.'s

Breakfast

Cocoa.

THE STANDARD FOR PURITY AND EXCELLENCE....

TRADE-MARK.

Costs less than one cent a cup

Our Trade-Mark on Every Package.

Walter Baker & Co. Ltd.

DORCHESTER, MASS.

ESTABLISHED 1780.

DYSPEPSIA

Horsford's Acid Phosphate reaches various forms of Dyspepsia that no other medicine seems to touch. It assists the weakened stomach, and makes the process of digestion natural and easy. Pleasant to take.

For Sale by all Druggists.

THE CHAUTAUQUAN

JANUARY, 1899. Vol. XXVIII No. 4

HARVARD COLLEGE LIBRARY DEC 27 1898 CAMBRIDGE, MASS.

DR. THEODORE L. FLOOD, EDITOR, MEADVILLE, PA.

VOL. XXVIII. JANUARY, 1899. NO. 4.

THE CHAUTAUQUAN

A MONTHLY MAGAZINE.

.....CONTENTS.....

Lyman Abbott, D.D. ..... *Frontispiece*
Mrs. L. M. N. Stevens ..... *Frontispiece*

REQUIRED READING.

The Old Bailey. Illustrated ..... *John Charles Thornley.* 323
The American Hotel ..... *E. J. Edwards.* 330
Lord Melbourne ..... *T. Raleigh, D. C. L.* 333
Saving the Life ..... *Jennie Fowler Willing.* 337
The Central Element of Organized Matter. II ..... *Prof. L. H. Batchelder, A.M.* 341
English Journalism ..... *Mary H. Krout.* 345

GENERAL READING.

The Snow-Storm. A Poem ..... *Clinton Scollard.* 350
Shooting Stars ..... *O. F. Bianco.* 351
The Yukon Country ..... *Bishop P. T. Rowe.* 355
Some American Women in Science. II. Illustrated ..... *Mrs. M. Burton Williamson.* 361
Revolution in Traffic ..... *Adolph Schulze.* 368
The Barrys. A Story. Chapters VI.–VIII ..... *Shan Bullock.* 372
Evolution in the Kitchen ..... *Frances Albert Doughty.* 386
A House of Glass ..... *Jules Henrivaux.* 389
Dr. Joseph Parker. Illustrated ..... *William Eleroy Curtis.* 393

HISTORY AS IT IS MADE.

A Treaty of Peace; The President's Message; Election Aftermath; The Congressman from Utah; Race Riots and Revolution; In Church-land; W. C. T. U. Convention; Justice in France; A Republic for a Month; Other Foreign Events; Obituary. Illustrated 397

C. L. S. C. WORK.

C. L. S. C. Outline and Programs 405
Syllabus of C. L. S. C. Reading 406
The C. L. S. C. Classes 412
Local Circles 414
The Chautauqua Literary and Scientific Circle 426
C. L. S. C. Graduate Courses 428
C. L. S. C. Graduate Courses 430
The C. L. S. C. Class of 1902 432
Chautauqua Young Folks' Reading Union 434

Talk About Books 420

DR. THEODORE L. FLOOD, Editor and Proprietor, Meadville, Pa.

NEW YORK, Bible House.
LONDON, Kegan Paul, Trench, Trübner & Co., L't'd, Paternoster House, Charing Cross Road, W. C.
DUNDEE, SCOTLAND, Rev. Donald Cook, 6 Albany Terrace.

Entered According to Act of Congress, January, 1899, by THEODORE L. FLOOD, in the office of the Librarian of Congress, Washington, D. C

Yearly Subscription, $2.00.

LYMAN ABBOTT, D. D., COUNSELOR OF THE C. L. S. C., PASTOR OF PLYMOUTH CHURCH. BROOKLYN.

See "History As It Is Made."

MRS. L. M. N. STEVENS, PRESIDENT OF THE W. C. T. U.

See "History As It Is Made."

THE CHAUTAUQUAN.

VOL. XXVIII. JANUARY, 1899. NO. 4.

HARVARD COLLEGE LIBRARY
DEC 27 1898
CAMBRIDGE, MASS.

OFFICERS OF THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

JOHN H. VINCENT, *Chancellor*, 613 Mooney Building, Buffalo, N. Y. All "personal" letters should be so marked on envelope. LEWIS MILLER, *President*. JESSE L. HURLBUT, *Principal*. *Counselors:* LYMAN ABBOTT, D. D.; BISHOP H. W. WARREN, D. D.; J. M. GIBSON, D. D.; W. C. WILKINSON, D. D.; EDWARD EVERETT HALE, D. D.; JAMES H. CARLISLE, LL. D. MISS K. F. KIMBALL, *Executive Secretary*. A. M. MARTIN, *General Secretary*.

REQUIRED READING FOR THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

THE OLD BAILEY.*

BY JOHN CHARLES THORNLEY.

A TRIAL AT THE OLD BAILEY.

THE Old Bailey, doom-hall of thousands of wretched wights, is itself doomed. I mean the building, not the institution. After twenty years of negotiation and contention between the British government and the city corporation of London an arrangement has been completed for the building of a new Sessions House, wherein to hold the monthly sittings of what in modern legal parlance is called the Central Criminal Court—the highest crime tribunal for London and the surrounding district. As Newgate has ceased to be used as a regular prison, one of its wings will be pulled down and a new Sessions House erected in its place. Old Bailey is the name by which the present building and its predecessors have been

*The Notes on the Required Reading in THE CHAUTAUQUAN will be found following those on the books of the course, in the C. L. S. C. Department of the magazine.

popularly known for centuries, and for hundreds of years to come, I doubt not, the ancient designation will cling to the new Sessions House and any that may follow it.

Many readers of this magazine have doubtless walked along the curious, wedge-shaped street called the Old Bailey, which connects Ludgate Hill with Newgate Street, under the shadow of St. Paul's Cathedral. But only a few of these, I venture to say, have stepped from Old Bailey the street into Old Bailey the court-house and there witnessed a trial. Indeed, one may easily pass by and miss the Sessions House altogether. Like a prisoner in the dock, it seems to shrink from the public gaze, turning a dingy flank to the street, and presenting its best façade to a walled courtyard, into which judges, civic dignitaries, and other privileged folk are driven in order that they may alight from their carriages in privacy. The building is often confused, too, in the public mind, with the adjacent Newgate Prison, though the two are administratively distinct, the jail belonging to the imperial government and the court-house to the city corporation. Neither of those buildings is much more than a century old, but both stand on, or very near, sites that have been consecrated these five hundred years or more to the purposes of investigating and punishing crime.

SIR CHARLES HALL, Q.C., M.P.
Recorder of London.

Well, then, imagine yourself seated betimes one Monday morning in the box reserved for distinguished visitors. You are, I see, surprised and disappointed. I can, for the nonce, read your thoughts like a book, and this is their purport: "Can this low-ceiled, ill-ventilated, unadorned chamber, this big square box, with every inch of its floor penned, pewed, and gangwayed, this dingy third-rate justice hall, inferior to nearly every assize court I have seen in my tour through England, not to mention our courts at home—can this be the famous Old Bailey?" Yes, such it is; or, to be quite accurate, the chief portion of it. However uncomfortable and undignified it may be, it has somehow served the purpose for which it was built, and during 113 years more sentences, whether of death or imprisonment, have rung across from that dais on our right to yonder dock on our left than in any other court that I can call to mind in the whole world.

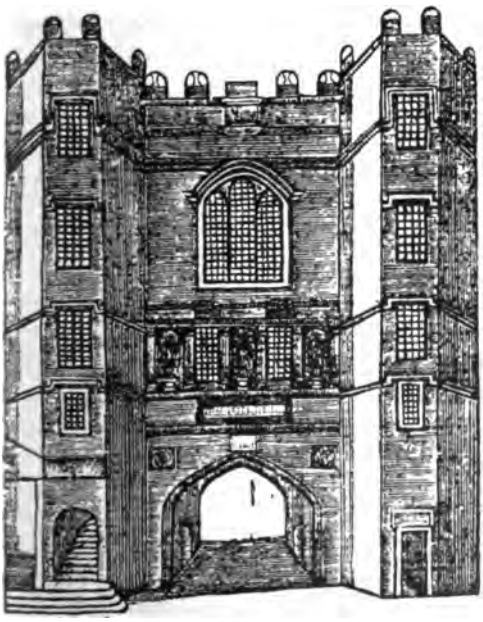
Examine the dais. It monopolizes one side of the hall and is strewn with sweet herbs to prevent a recurrence of the jail-fever—pray do not laugh—which carried off some of the bigwigs on two occasions in the last century. At the rear is a continuous cushioned bench, faced by half a dozen movable desks and partly overshadowed by a canopy supporting the royal arms. These and other details appear in the photographic "interior" accompanying this article—a picture which, owing to the official ban upon everything that the judicial bench conceives to be without precedent, was taken secretly from a point not far from

NEWGATE PRISON TO-DAY, THE SESSIONS HOUSE INDICATED BY A CROSS.

where we are sitting. In front of the dais, on a slightly lower level, is the table used by the clerk of arraigns and his subordinates. Right opposite us is the jury-box, and on our left the dock, above and behind which is the cramped public gallery. Down below, in what is called the well of the court, lies truth—so the bewigged barristers and unadorned solicitors who sit there would have us believe. On our side of the court seats reserved for the press, for privileged visitors like ourselves, and for jurymen in waiting rise tier above tier from the well to the level of the dais.

While we have been looking round, barristers, solicitors, reporters, officials, and loungers have well-nigh filled the body of the court. Half-past ten strikes and simultaneously two or three loud knocks are given upon the outer side of one of the doors opening upon the dais. Then every one stands up, for from time immemorial that sound has heralded the approach of the dignitaries constituting the court. The lord mayor, attended by his sword-bearer, the city marshal, the sheriffs, the under-sheriffs, some of the aldermen, and the recorder, enters the court, and, after an exchange of bows with everybody present, takes the seat of honor under the royal arms, below which has been fixed one of the ceremonial swords of the city, with point studiously upturned in token of his nominal supremacy. The recorder takes the seat immediately to the right of his titular superior, and the aldermen and sheriffs spread themselves out on the left, according to seniority, while such officials as the sword-bearer and the city marshal disappear. Each member of the commission, as it is called, besides wearing the robes of his rank or office, carries an exquisite bouquet of flowers, welcome alike for color and fragrance in such drab, stuffy surroundings.

NEWGATE



NEWGATE PRISON EARLY IN THE EIGHTEENTH CENTURY.

"Oyez, oyez, oyez," begins the black-gowned usher in the only Norman-French he knows, and he goes on, in unmistakable cockney English, to declare the court open, concluding his formula with, "God save the queen!" Then the lord mayor considers the excuses of, or objections to, persons summoned to sit on the grand jury, and, this duty accomplished, he has nothing more to say or do beyond looking ornamental. Nor does he do that long, for he suddenly remembers, in accordance with the usage of recent years, that he has a pressing engagement, and resigns his chair to the senior alderman present. Meanwhile the recorder, who is the highest law officer of the city corporation, charges the grand jury; some true bills are returned; the common jury is sworn; a prisoner pops up through a trap-door into the dock from the cells below; and the first trial of the Sessions commences. The recorder, a greater man in reality than the silent magnates who pay him his salary, adjudicates solely in the cases brought up on this and the following day.

JUSTICE WILLS, WEARING A FULL-DRESS WIG.

On the Wednesday one of the judges of the High Court of Justice makes his appearance and takes the seat hitherto occupied by the recorder, but never that of the lord mayor, who remains chief commissioner throughout the Sessions. While the queen's judge commences to try the graver cases, the recorder moves to the New Court (new only by comparison) and there takes good second-class indictments. Another of the corporation's law officers, the common sergeant, presides over a third court, and when the calendar is exceptionally heavy a fourth court is formed by Mr. Commissioner Kerr. The High Court judge continues to preside over the chief tribunal until the end of the sessions, which last about ten days, though they have been known to extend over six weeks, overlapping the succeeding sessions.

"How comes it," asks the intelligent stranger, "that the notables of the one square mile of central London, commonly called 'the city,' have so much to do with the ceremonial part, at least, of a court that takes cognizance of all serious crimes committed in the metropolis or its environs?" It is a privilege that dates back to the fourteenth century, when it had become customary to lodge all the felons of the city of London and of the county of Middlesex in one of the gates that pierced the city wall—New Gate. These prisoners were tried by various haphazard methods until Edward

III. decreed, in 1327, that the lord mayor for the time being should be one of the judges, and it is in that reign that we find the first definite reference to a Sessions House in the Old Bailey—a name that some antiquarians hold to be derived from the *ballium*, or open space beyond the city wall. From that time forth the citizens, who had already purchased from the crown the right to appoint a sheriff of Middlesex, tightened their hold upon the administration of justice in the city and county, holding themselves responsible both for the gate-prison and the court-house, which they rebuilt and altered from time to time. The crown never quite relinquished its hold upon the tribunal, and always, so far as I can make out, had the power of enlarging the commission at will, though the lord mayor usually kept his place at the head of it.

JUSTICE HAWKINS, WEARING AN UNDRESS WIG.

Thus we find that no fewer than thirty-four commissioners sat at the Old Bailey in October, 1660, to try the twenty-nine survivors of the court which had condemned Charles I. to death eleven years before, and city opinion, which was still Republican in the main, was scarcely reflected at all on that commission. The chief prisoners, notably Major-General Harrison, Sir Hardness Waller, Colonel Carew, Hugh Peters, and Harry Marten, offered a grand Ironside defense devoid of legal subtleties, and were hanged. Only the weaklings, who expressed insincere contrition, were spared. Harrison had been one of the narrowest of the Puritans, and had even quarreled with Cromwell when the latter spoke of toleration, but who can fail to admire him for those last words of his? "If I had ten thousand lives I could freely and cheerfully lay them all down to witness to this matter!" As a blow to constitutional liberty the hanging of Charles' judges was as futile as the burning of John Milton's "Eikonoklastes" and "Defensio Prima" by the common hangman at the Old Bailey in the same year.

Many "legal murders" have been perpetrated at the Old Bailey, and one at least is known to every student of English history. William, Lord Russell was a man of heart rather than of great intellect, whose sturdy Whig instincts revolted against the corruption of Charles II.'s court. He associated himself with a movement for purging the government of the day of its grosser faults. About the same time the Rye House Plot, which was really directed against the king's life, was exposed, and

unscrupulous people linked Russell with the conspiracy, of which he knew nothing. The government sent orders down to the Old Bailey for a conviction at any price. To their lasting shame, the sheriffs packed the jury; the attorney-general, Sir Robert Sawyer, obstructed the defense; and the president of the commission, Sir Robert Pemberton, only grudgingly allowed the prisoner's wife to take notes of the evidence. Sentence of death was passed, and not even the £100,000 offered by the Earl of Bedford for his son's life mollified the king, who probably did not happen at that time to be hard up. Lord William was beheaded in Lincoln's Inn Fields.

AN EXECUTION AT TYBURN (HOGARTH).

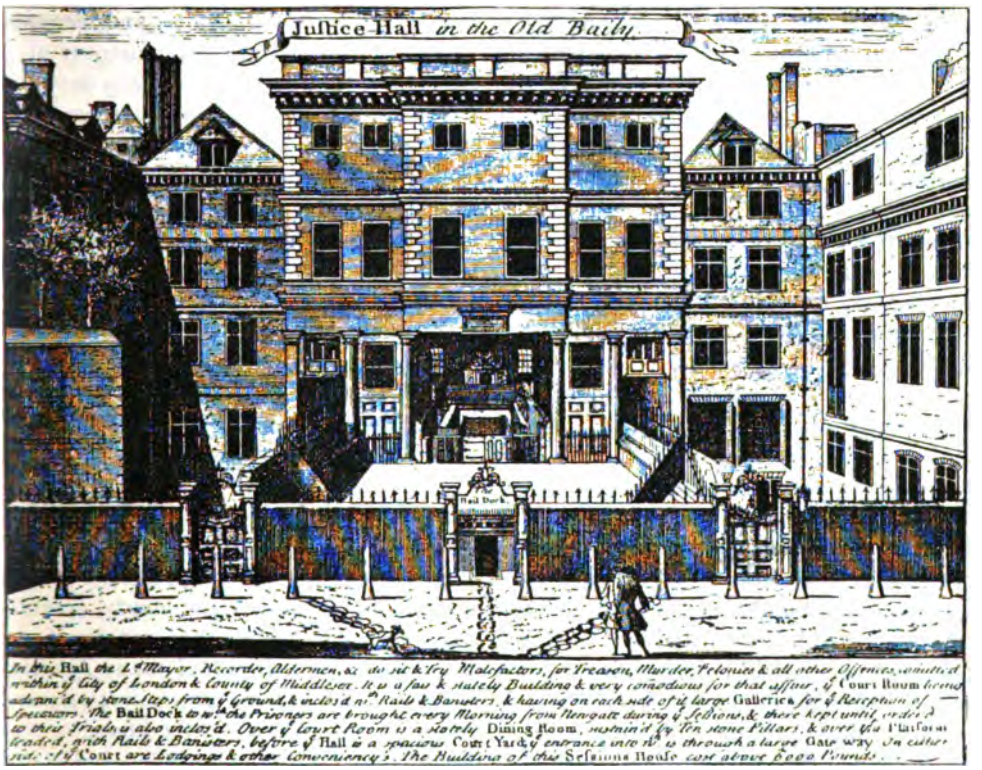
The people sentenced to death at the Old Bailey in the eighteenth century were for the most part scoundrels who richly deserved punishment. Prominent among these were Jack Sheppard, a burglar who raised himself into a vulgar heroism by escaping twice from Newgate; Jonathan Wild, who posed before the authorities as a police spy, but was in reality a receiver of stolen goods, and Dr. Dodd, a brilliant clergyman who ran into debt and forged the name of young Lord Chesterfield (to whom the famous "Chesterfield Letters" were written) on a bond for £4,200. Then there was the poet Richard Savage, sentenced to death for killing a man in a drunken brawl, but pardoned on the intercession of influential courtiers.

Until 1783 most of the murderers and felons sentenced at the Old Bailey were hanged at Tyburn, then a lonely spot on the great highway to the west. Hogarth's eleventh plate in the "Idle Apprentice" series is worth columns of description. There we see the culprit riding in a cart, sandwiched between his own coffin and a Wesleyan preacher, while the state-paid chaplain is gloriously isolated in a coach, and the crowd is holding a sort of fair.

CHARLES MATHEWS, A LEADING OLD BAILEY BARRISTER.

Later on the hangman, having finished his pipe, will descend from the triple gallows and tie the rope around Tom's neck; then the cart will be drawn away, and his legs will dangle in the air. In 1783 the gibbet was removed to the Old Bailey, in which thoroughfare thousands upon thousands of people crowded to see the hangings until 1868, when public executions were abolished in England. The present jail and court-house were built shortly before the close of the Tyburn days, and the gateway formed part of the former until 1816. The Sessions House has been added to at subsequent dates and has become uglier and uglier. Within its walls have been tried Hadfield, for shooting at George III., in 1800; Bellingham, the assassin of Prime Minister Spencer Perceval, in 1812; the Cato Street conspirators, for plotting to murder the whole cabinet, in 1820; Oxford and Francis, for shooting at the queen, in the early forties; and the scum of London during the last 113 years. In one week two years ago Justice Hawkins, who is popularly known as "the hanging judge," sentenced to death three men and a woman.

In 1834 the jurisdiction of the Old Bailey sessions was extended to the nearer portions of the counties of Surrey, Kent, and Essex, and at the same time the constitution of the court was assimilated somewhat to that of the provincial assize courts, though the civic authorities were allowed, as they still are, to have the semblance of power. Down to the days of Charles Dickens Old Bailey advocates had an unenviable reputation for bullying and trickery, but that is all changed now. The tone of the whole court is higher than it ever was before, and the leading practitioners there to-day —men like Mr. Charles Mathews, Mr. Gill, Mr. Horace Avory, Mr. Bodkin, and Mr. Geoghegan—have demonstrated that it is possible to be keen in a gentlemanly way and lucid without being superficial.



OLD BAILEY SESSIONS HOUSE IN 1750.

C—Jan.

THE AMERICAN HOTEL.

BY E. J. EDWARDS.

FORTY years ago the landlord of a hotel upon Broadway, New York, which was successful although not fashionable, said to some one who asked him the secret of his success that it consisted in being faithful to the three B's. He had been loyal to the rules which those letters suggested, and if he had not drawn as conspicuous a clientage as the St. Nicholas or the Metropolitan, then two of the most famous of American hotels, he nevertheless filled his house with contented guests and made money. To-day that same landlord is able to withstand all of the intense competition which has brought despair to many New York hotels once famous, and he still insists that it is the three B's which have kept him in the path of prosperity.

These letters are synonyms for the words bread, butter, and beds, and the rule which the letters are intended to suggest is that the quality of each of these things must be of the best if success is to be the lot of a landlord. It would be hard to find any one who has met with fortune or a fair degree of success as a hotel-keeper who would not admit that bread, butter, and beds are the basic test of good hotel-keeping. With them as a foundation, every hotel which is to-day running in the full tide of prosperity has developed the vast organization, the immensity of detail, the watchful eye upon the varying moods of those who are transient or permanent guests at hotels which have created the modern marvel which the characteristic American hotel is.

Forty years ago the American system was the almost exclusive method by which hotels in the United States were managed. In New York, and perhaps two or three other large cities, there were some hotels whose management was upon the European plan, but most of them entertained guests whose purses were narrow and none of them, with two exceptions in New York City, maintained any popularity. On lower Fifth Avenue, New York, was a hotel, perhaps better known in Europe than the United States, whose management was characterized by what is known as the English plan. It was English not only in the manner of charging for rooms, service, and meals but also in the simplicity and quietness of its management. There was no gaily decorated bar-room, no luxuriant lounging-room. The aim seemed to be to give the guests as great seclusion as was possible. It entertained because of this reputation many of the distinguished Europeans who came to the United States and it was the favorite for those who were of noble lineage.

The hotel has not yielded to the new influences which within the past ten years have so completely dominated hotel life and management, but it has passed into obscurity and so far as its glories are concerned is nothing more than a tradition. Yet this was not because it was rigid in its adherence to the English plan. Little by little other hotels adopted that system, accompanying it with the luxury, splendor, and oftentimes with the garish display, which are characteristic of many American hotels. The system grew in popularity. Many hotels which, justly enough, claim wealthy and fashionable clientage made a compromise by which guests could make their choice, living either on the American plan of paying a lump sum per day for rooms, meals, and service, or the European plan of paying a fixed price for rooms and for each individual dish ordered in the dining-room. It was discovered that in the larger and costlier hotels it was cheaper for two persons who could occupy one room to accept the European plan. Many of the hotels gave such large portion for a single order in the dining-room that each portion was sufficient for two, and in fact that was

so generally recognized that it is a custom which has become almost general of placing upon the bill of fare half portion items.

The other day the hotel which many have deemed the most famous in the United States, a house where politicians have for nearly forty years been accustomed to gather and where conferences which have determined presidential nomination and in one case certainly a presidential succession have been held, departed from what was deemed an inflexible purpose to adhere to the American plan and announced that its guests could make choice of either system.

This was accepted as the final surrender of the old and universal system to the new order, and must have been done by this hotel in order to meet the competition which has been created by the splendid structures, the luxurious and almost extravagant management which are characteristic of the latest development of American hotels.

The hotel business in the United States, especially in the greater cities, has become, like almost every other large commercial enterprise, greatly specialized. The successful hotel-keeper, although his house is open to any guest who is respectable, nevertheless aims at the identification of it with some special clientage. Of course, it is easier to do that in New York or in Chicago or Boston than in smaller cities, but the tendency exists everywhere. Sometimes it occasions embarrassment. As, for instance, the manager of one of the best known hotels in the West is compelled to depend for steady business chiefly upon the people of the West and the South, although he always has in his house some from the Atlantic coast. He has maintained the popularity of his house for his western clientage by making a close study of the whims, the favorite foods, and favorite way of preparing them and of the other characteristics of that paying clientage. He desired, however, upon one occasion to show his eastern guests that he was mindful of their tastes, and he therefore sent to Buzzard's Bay for two barrels of an especially choice oyster which is extremely popular in the East because of its salty flavor, its small size, and its hardness. At an expense of $7 a barrel for fast freight charges, and nearly three times as much as that for the oysters themselves, he had them in his kitchen in less than two days after they were taken from Buzzard's Bay, not far from ex-President Cleveland's home. The manager told his eastern guests that they would have a treat at the Sunday dinner next day, but he said it would be at the expense of the good opinion of many of his southern and western guests. His judgment was correct. Those who had never tasted an oyster within a few hours after it had been brought from the water rebelled against these fine specimens and insisted that somebody in the kitchen had sprinkled them with salt and spoiled them. Many were the complaints of the service of artificially seasoned oysters, but the eastern guests to their surprise found that they obtained that day in that far western city a delicacy fully as good as they could have found at home. The experience taught the manager a lesson, and afterward he was careful to discriminate between eastern and western guests in service of that kind.

The anecdote, in a humorous way it is true, nevertheless illustrates the extreme caution with which the successful manager must treat his guests, especially where their fancies or whims or prejudices are concerned.

About ten years ago the new development in American hotel structures and management began. Those who were in the hotel business say that it was the direct result of one or two appalling hotel fires. Capitalists and hotel managers perceived that there could be no greater advertisement for a hotel than the assurance that it was absolutely fire proof. In St. Louis, after a holocaust which had shocked the nation, one of the capitalists of that city determined to build a hotel which would be able to resist anything short of an earthquake or an explosion of dynamite. After the building was finished in order to demonstrate its absolute safety barrels of tar and other inflammable material were, it is

said, placed in one room and set afire. They burned fiercely, made a great smoke, caused some discoloration, but otherwise did no damage. The hotel at once gained a profitable business. The success of that experiment was swiftly followed by the erection in New York of a fire-proof structure which was made especially attractive to eyes to which high combinations of color, much gilt, the most luxurious of furniture, and a general atmosphere of gaudy display were attractive. This house adopted the European plan and in a little while gained repute, not only as a swift and large money-maker, but also as bound to change in great measure the characteristics of hotel buildings and management in New York City. That prediction was found to be true and its accuracy was found justified much sooner than any one presumed would be the case.

It is a fairly well-authenticated tradition that one of the richest of the citizens of New York having occasion to spend a day and a night in Philadelphia was advised to register at a hotel of whose existence he had never heard. He found when he entered his room peculiarities which charmed him. It seemed to him as though he had been ushered into a most attractive room in a private house. Luxury was there, but it seemed subordinated to comfort. Every wish was anticipated and silently met. He appeared to be not only a guest in name but an honored guest in fact and yet the service was unobtrusive.

He was so much impressed with his experience that he conceived a plan and after long consideration of it decided to put it into execution. He determined to tear down the old homestead, a great brick structure on Fifth Avenue considerably above the center of the more fashionable hotel life of New York, and cause to be erected upon the site a great fire-proof building for a hotel whose management he would entrust to the manager of the Philadelphia hotel where his experience had been so happy. He wanted the same characteristics, the same luxuries subordinated to comfort, and the same methods of management for this new and great hotel which he had observed in the small building in Philadelphia. The plans became fact; the building itself and its management united made one of the marvels of New York. Fashion quickly bestowed upon it its high approval. The princes of the earth came there and rejoiced in their experiences, and while it was said that none but the wealthy were able to partake of its amazing luxury, perfect service, and artistic cooking, yet that assertion was not true, for the traveler with moderate purse was able to find accommodation there without great drain upon his income. The success was so instantaneous that soon after a relative of the owner of the hotel constructed upon an adjoining plot, after having torn down his birthplace and the home of his family for many years, another structure twice as large as the first, and the two were joined in one management, both together being able to house more than three thousand persons.

An example like this was sure to be speedily followed. Farther and farther up Broadway, Fifth Avenue, even to the boundaries of Central Park and beyond, miles away from that section which a few years ago was the center of fashionable hotel life, capital aggregating some ten millions has been invested in mammoth fire-proof structures where comfort supplemented by luxury has been the desideratum; where service that is unobtrusive and yet instant and perfect is maintained, and where the latest and best development of American hotel methods is discovered.

It costs immense sums of money to maintain these hotels. What would seem to be extravagance, for instance, in waste of food is reported by the managers to be instead necessity, for the highest grade of service in the dining-room cannot be maintained if there be any other method adopted than that which in the old days would have appalled hotel managers by reason of its seeming colossal waste.

The ideal of the new manager is the anticipation of every wish and the meeting of it with the least display. In the best of hotels a guest seems to have no need of

giving the slightest thought for his care or for his comfort. Of course, he pays for this, and yet on the whole the charges are moderate when it is remembered what he has received for them. In fact, thoughtfulness has gone so far that in the largest of American hotels there has recently been established a national bank known by the name of the hotel, whose business is almost exclusively devoted to the convenience of the guests of the hotel and those who are connected with it.

What is obtained in New York is speedily finding foothold in the other large cities of the United States. There are two or three which are notorious for lack of modern hotel conveniences, but with these exceptions in all cities of what are known as the second or even the third grade, there are now hotels which are fairly good representatives of the supreme comfort, luxury, and enjoyment which are possible to be obtained in New York City hotels.

In New York, however, there has been recently an unexpected illustration of the truth of the saying that the successful hotel manager may sometimes find success in searching for a special clientage. One of the greater hotels of lower Broadway, one made conspicuous by one of the most startling tragedies ever committed in New York, seemed doomed by the competition which these new hotels have successfully established. It was about to be given up when a New England hotel manager, being of the opinion that in New York there was opportunity for at least one hotel conducted in the old-fashioned way with moderate rates of three dollars a day on the American plan, decided to venture the experiment. His success amazed all veterans and the newcomers as well. There was, just as he believed, room in New York for one great hotel conducted upon the American plan with no effort of special service or display and no pretence at elaborate cooking. But it is doubtful whether more than one hotel of that kind could succeed in that city.

LORD MELBOURNE.

BY T. RALEIGH, D. C. L.

THE great families which play so conspicuous a part in English politics may be deemed to justify their existence so long as they continue to bring into the public service a succession of able men, animated by a strong hereditary sense of their duty to the nation. Of this general maxim the career of Queen Victoria's first prime minister will supply us with an excellent illustration.

William Lamb, the second son of the first Viscount Melbourne, was born in 1779. He received his education at Eton, Cambridge, and Glasgow, and he chose the bar as his profession. Just as he was beginning his professional work, the death of his elder brother changed all his prospects in life by making him an eldest son, heir apparent to his father's peerage. His family was rich, and in the days before the Reform Act of 1832 no rich man had any difficulty in finding a seat in the House of Commons. Lamb entered Parliament as member for Leominster in 1806; his handsome presence and his marked ability soon secured him a favorable hearing. Like other young men of fashion, he rather affected to be idle and lazy; only his intimate friends knew how much he had read and how carefully he had cultivated the habit of thinking for himself. By his birth and training Lamb was a Whig; he allied himself by preference with the moderate section of his own party, and with the liberal Tories who followed the star of Mr. Canning.

In 1827 the long-lived Tory government of Lord Liverpool came to an end, and Mr. Canning formed a coalition ministry in which Lamb held what was then considered the subordinate office of chief secretary for Ireland. He continued to hold the same post under the "transient embarrassed phan-

tom of Lord Goderich" (who was prime minister for a few months after Canning's lamented death) and in the coalition ministry of the Duke of Wellington. In 1829, on his father's death, William Lamb became Viscount Melbourne, and took his seat in the House of Lords.

When the Duke of Wellington and Sir Robert Peel surrendered their Tory principles by consenting to admit Roman Catholics to political equality with Protestants, Lord Melbourne warmly supported the policy of his chiefs. On principle and by temperament he was opposed to all measures of persecution and exclusion; but he was always a genuine Whig in his dislike of clerical ascendancy. When it had appeared that Catholic emancipation had made the Irish priesthood a power to be reckoned with in English politics, Lord Melbourne's discontent found expression in a characteristic jibe: "All the wise men were in favor of emancipation," he said, "and all the fools were against it. And the worst of it is, the fools were in the right."

On the question of parliamentary reform Lord Melbourne took an independent line of his own. He agreed with the Tories in holding that the English electoral system worked well on the whole, and needed no improvement. But if reform should prove to be inevitable, he differed from the Tories in holding that half measures were useless and impolitic; the whole question, he thought, must be dealt with on some principle which would commend itself to the common sense of the people. In 1830 reform was plainly inevitable; Lord Melbourne broke with his Tory allies, and took office as home secretary under Lord Grey. There were those who prophesied that if Melbourne were tried in high office, he would prove unequal to his duties; but the prophets had to own themselves mistaken. In his own department the new secretary of state showed industry and capacity; in the cabinet he was found to be a shrewd and honest adviser. His careless manners, and his unfortunate habit of swearing, detracted nothing from his popularity out of doors. He was not fond of making speeches, but when directly challenged in the House of Lords he showed the courage and resource of a debater.

With King William IV. Lord Melbourne was always a favorite. In spite of some eccentricities of behavior, the king commanded the respect of those ministers who were brought into close contact with him. He was not so clever as his elder brother, George IV., but he was a better man, and a better judge of character. He trusted Melbourne instinctively, just as he distrusted Brougham; the blunt sagacity and the aristocratic indifference of the home secretary were more to the mind of their royal master than the domineering and intriguing genius of the chancellor. When Lord Grey resigned in 1834 the king insisted on making Lord Melbourne prime minister, and Lord Melbourne, with some misgivings, consented. It should always be remembered that the choice of a prime minister is an act which a constitutional king may, and sometimes must, perform without the advice of his ministers. It is true that his liberty of choice is always restricted by circumstances; he may find himself virtually compelled to send for the only statesman who can command a majority in the House of Commons. But when the leadership of a party is divided, the personal preference of the sovereign may be an important factor in politics. At the same time, we may be sure that Melbourne would not have accepted the king's nomination if he had not felt sure that the party and the electorate generally would ratify it. The king can make a prime minister, but if the Commons refuse to let the minister have the money and the powers which he requires to carry on the government, what then? Charles I. would have tried force, and George III. would have tried bribery, but in face of a parliamentary majority a nineteenth century king is almost powerless.

Lord Melbourne's first administration was not very successful; it lasted but a short time. In 1835, Lord Althorp, who led the House of Commons, was summoned to the House of Lords on the death of his father, Lord

Spencer. It was necessary to reconstruct the ministry; and the king took the opportunity to hint that his Whig advisers no longer possessed his complete confidence. Lord Melbourne, not unwillingly, gave way, and the Tories enjoyed a short term of power, but the experiment was not successful; Melbourne kissed hands once more, and proceeded to form his second administration. He came in again with most of his old colleagues, but he left out one or two ardent reformers, who would have alarmed the king; and he dispensed with the services of Brougham, who was Radical or Conservative as the humor took him, but always self-willed and troublesome. The disappointed ex-chancellor was naturally the most formidable critic of the new administration, but the official Whigs, if they did not cover themselves with glory, contrived to hold their own in debate; and the last years of William IV. were free from the anxieties which must always attend a change of government.

On a June morning in 1837, King William passed away, and the Princess Victoria began her long and happy reign. The Privy Council was summoned for the same afternoon; the new queen declared her intention to govern in accordance with the laws and customs of the realm; her councilors did homage; Lord Melbourne and his colleagues kissed hands, and were confirmed in their appointments. Their tenure might have been very short, for at that time the law required that the accession of a new sovereign should be followed by a general election. (This rule of the English constitution was altered in 1867.) When the elections were over the number of Lord Melbourne's followers in the House of Commons was somewhat reduced; but they still formed a working majority. The nation was not in love with the Whigs, but preferred to make no sudden change at the beginning of a new reign. Much, it was felt, would depend on the advice tendered to the young queen by her prime minister, and it was generally acknowledged that Lord Melbourne was specially well fitted for the delicate and important duty imposed on him. His language was often more vigorous than young ladies are accustomed to hear, but his temper was perfect, and his sense of public duty was strong. The queen was high-spirited; and her German relations may possibly have taught her the autocratic view of her position; Melbourne taught her the art of constitutional government, and helped to bring her into sympathy with the liberalism of her people. The prime minister and the queen were like father and daughter, and some Tories grumbled because they feared that Melbourne was making the queen a Whig. There never was any good ground for this complaint. Lord Melbourne was not a keen partisan, and he knew very well that a party relying on court influence would have but little chance of success at the polls. He may have helped to make the queen a liberal, but not in any party sense of the term.

In 1839 the government of Lord Melbourne found itself unable to command a majority in the popular House; the prime minister tendered his resignation, and the queen, perhaps with some reluctance, sent for Sir Robert Peel. When the list of the new ministry was submitted for her approval, Her Majesty discovered that Sir Robert proposed to remove the ladies of her bedchamber. The leaders of the Tory party were naturally unwilling to allow the wives and sisters of their Whig rivals to retain their court offices. These offices are not, in themselves, of any political importance, but they give opportunities of confidential access to the sovereign. There was nothing unreasonable in Sir Robert Peel's demand, but the queen would not submit. At the request of Her Majesty, Lord Melbourne resumed office and induced his colleagues to do the same. By this course of action he impaired to some extent the effect of his lessons in constitutional government, and made himself responsible for an act of royal obstinacy which he probably did not approve. The Tories lost nothing by the postponement of their hopes; the general election of 1841 gave Sir Robert Peel a decisive majority and enabled him to form an exceptionally strong administration. With his defeat in 1841 the political career of

Lord Melbourne comes to a close; for in the following year a slight stroke of paralysis disabled him for all arduous work, and the leadership of his party passed into other hands. He died in 1848.

In all the stages of his public life, Lord Melbourne's statesmanship was conservative in its spirit and methods. He honestly believed in the monarchical and aristocratic institutions under which he was born, and he did not believe in reforming them on any abstract principle. Though he will be remembered as one of the authors of the first Reform Act, no man was ever less of a democrat. "Can't you let it alone?" was the question with which he met the schemes and suggestions of his more enterprising colleagues. He lived in an age when political economy was a power in the land, but he never accepted the principle of free trade. He was especially hostile to free trade in corn, first, because he thought it inexpedient that the laboring people of England should depend for their subsistence on foreign supplies; and second, because he thought protection and high rents were necessary conditions, without which there could be no landed aristocracy. In some other matters of importance, he allowed the economists to have their own way. He supported the English amended poor law of 1834, and he was responsible for the Irish poor law of 1838. In his relation to the established churches he was, as we have already noted, a typical Whig; he desired to extend the bounds of religious toleration, and to assert the supreme control of the state over all religious endowments and ecclesiastical persons. He spoke on church questions merely as a man of the world; but he was fond of reading theology; indeed, Lord Melbourne is said to have been the only prime minister, until Mr. Gladstone, who took the trouble to study the works of clergymen who were recommended to him for bishoprics. But the bent of his mind was skeptical; his opinions were formed under the influence of a skeptical generation; he would have found something to criticize in any church or creed. We discern in his speeches and in his public acts a consistent purpose to do right, but we discern also the inborn tendency to doubt and to suspend judgment. "I wish," he said, "I were as sure of anything as Tom Macaulay is of everything."

There are some passages in Lord Melbourne's letter which lead us to think that if he had been born fifty years later he would have been an effective popular speaker; but in his day English statesmen of the first rank were content to speak from their places in Parliament, and made but little use of the platform. A campaigning speech is, almost of necessity, a set speech, delivered to a friendly audience, and Lord Melbourne was not at his best unless in presence of the enemy. Even in the House of Lords his easy temper often kept him silent when a more sensitive man would have been roused to answer the attacks of Lyndhurst and Brougham. His taste, cultivated by long study of the best authors, was too fastidious for ordinary political purposes; he disliked all forms of popular display; he thought that a statesman who addressed himself to the "gallery" was probably trying to secure the votes of what Melbourne called the "blackguard interest." When the houses of Parliament were destroyed by fire in 1834, the king was ready to place Buckingham Palace at the disposal of the legislature. Lord Melbourne demurred; he feared that if the House of Commons were removed to a roomier building, strangers would be admitted in larger numbers. He referred to the history of the French Revolution to show how a deliberative assembly may be distracted and thrown into confusion by the presence of a crowd.

Lord Melbourne's private life was overshadowed by disappointment and sorrow. He married Lady Caroline Ponsonby, a daughter of the Earl of Bessborough, a charming but extremely foolish woman, who made herself the talk of the town by her infatuated worship of Lord Byron. The only child of this unlucky marriage, a gentle, handsome boy, was afflicted with a hopeless disease of the brain. Melbourne bore his trials without complaining; he was good to his wife while she remained with him, and

he tended his son with unwearied kindness. His chief consolation, in all his griefs and anxieties, was found in his books. It is quite in keeping with the rest of his character that Lord Melbourne, an insatiable reader and an accomplished critic, made no serious attempt to distinguish himself in literature. He probably thought himself pretty strong in these matters "for a gentleman," but not strong enough to place himself in comparison with professed scholars.

His place is not among the greatest, in letters or in action. But he won for himself no small measure of respect and affection; and he helped to steer the ship of state safely through a critical time.

SAVING THE LIFE.

PROBABLY none of the warnings of Scripture are more needed by many souls than that given in the apostolic quarrel about who should be the greatest. It was certainly a very weak and childish affair. A struggle for preeminence among the disciples of a Master who was so poor he had not where to lay his head, dependent for his food upon the charity of those who risked all in his service, and obliged to work a miracle to get money to pay his taxes. It was most inopportune. The gloom of Gethsemane and Calvary had begun to settle upon his soul. He was in the first act of the awful redemptive tragedy. It was unutterably discouraging. He was lifting to his lips the cup of doom prepared by sin for every human soul. He was about to taste death for every man. The life he was to purchase could come only by the casting out of the old, selfish nature. Yet those whom he had been teaching for three years, and who had been permitted to enter with him the very inner sanctuary of the divine presence, were giving way before the very first onslaught of the enemy, to that pride and selfishness that he was sacrificing his life to eradicate.

Foolish and inopportune and discouraging as was that miserable dispute, it was no worse than what the Master has heard in the hearts and homes of Christians many and many a time nowadays, and always. That same wretched question echoes and reechoes through our lives, day by day, like the ceaseless wash of waves.

The Savior was at infinite pains to bring them and us to a better understanding of life and its uses. He said again and again, "If any man desires to be first among you, the same shall be last of all and servant of all." Our stumbling so constantly at this point is a sure index that there is a *right impulse* of the soul, and a strong one, that has broken loose from restraint and lost its way, and from that comes the trouble. We desire to save the life from utter oblivion and forgetfulness.

> To die,
> To sink as sinks the traveler who falls
> In the streets of busy London,
> When the crowds close in and all's forgotten.

This seems such a pitiful fate, so like never having existed, so like being blotted completely from the roll of being, we look about in desperate earnest to find something within the compass of our power that shall give us immortality. We want to clamber a little way above the common herd whose very names will be forgotten before their bodies fairly turn to dust. A fortune, political preferment, professional reputation, literary fame, something must help us to a niche in the rocks where we may write our little story with a hope that the waves may not wear it away for at least half a century.

Jesus said, "Whosoever will save his life shall lose it; but whosoever will lose his life for my sake the same shall save it."

They who have really saved the life, living through the ages in the continued vitality of their thought and action, are those who have wrought by the Master's rule, losing all in a single-eyed devotion to right principle.

William, prince of Orange, enjoyed his

broad estates and elegant life, probably, with a nebulous notion of human equality floating through his brain. In the midst of luxury, how could he know the hard life of the poor? In high favor with royalty, how could he understand the grinding taxation necessary to support regal pomp and glory? God meant him to be the champion of civil and religious liberty, and it took hard discipline to arouse him fully to the need of the hour.

The Romish Church stole his son, and that awakened him to a sense of its tyrannies. The Duke of Alva, with his dragonnades, trying to establish the Inquisition in Holland, made personal liberty a myth. When the silent statesman began actively to remonstrate, his estates were wrested from him; and then, with an empty purse, insufficient service, indifferent clothing, no place of safety, a price on his head, the proud Prince of Orange began to know the meaning of poverty. Then he became truly the friend of the poor.

When, under the assassin's steel, he was dying for their liberties, his last words attested the completeness of his identity with the cause of the poor, "O my God, have mercy upon my poor people!" A wail went to heaven from every home in Holland. He who had lost his life for the sake of a noble cause had gained the first place on his country's roll of honor and in the regard of all good men and true.

A man in our own country and time lived and died like William the Silent, losing his life for the oppressed and saving it to the best and most enduring immortality. He gave liberty to as many millions as did the Prince of Orange, and humbled as proud an oligarchy.

Lincoln came from among the "poor white trash" of the South, yet as princely a soul was housed in his rough physique as lived in the bosom of the man of elegant culture and noble blood. One has said of him: "His large palm never slipped from the poor man's hand. A child of the people, he was as accessible in the White House as he had been in the cabin. The griefs of the poor African were as sacred to him as were the claims of the opulent white man." Measuring all by their humanity, he found them essentially equal. Seeing in God the Father of all, he saw in every man a brother.

In the senatorial contest between Lincoln and Douglas the latter was victorious. Lincoln said: "His life is all success, mine all failure. I would give everything for his opportunity of working for the uplifting of the oppressed." After the hard discipline of the years, his hour came. He was found equal to the complete self-giving that marked him the Christly man of the ages, and in the achievement he gave all, holding steady to his purpose even when his friends turned from him in distrust. At last he gave his life for the cause he served.

He was like the century plant that we saw a few years ago. After seventy patient years it burst into glorious bloom, and then it died. After the supreme act of his life Lincoln went to God, and the mourning throughout all lands where liberty was loved was as if one were dead in every household. Said a Russian lady upon the shore of the Black Sea to a tourist: "So you are from America—Lincoln's land. When word came that they had killed him, I could do nothing for hours but walk the floor and say, 'Lincoln is dead! Lincoln is dead!'"

The great commoner, he interpreted to the people their own sense of dignity. Though he lost his life, he saved it by the suffrage of universal thoughtful humanity.

The life of Jesus the Christ was the most emphatic illustration of saving the life through its loss.

He went down into the very depths of human lostness that he might put his great heart under the burden of the curse. Like a strong swimmer who had dived among the monsters in the caverns under the sea, he came up pale, exhausted, quivering in every nerve, but bearing in his arms a rescued race.

Of all who ever lived none so completely and abundantly saved his power for good, his vitality, his life as did Jesus. To-day the thought of the crucified Galilean is the mainspring of the civilizations. All bonds

that bind together the nations and hold them back from savagery are of his weaving. All cords that draw them toward the throne of the Eternal are of his twining. He is not only the way and the truth, he is also the life.

Since it appears plain that to make the life amount to the most in God's work, it is necessary to lose it, we may ask what it is to *lose the life* for Christ's sake.

Is it not to submit to his control all that goes to the make-up of the being?

Perhaps in no point of self-surrender does the will take a more stubborn stand than in submitting to him the conduct of the life.

Self-direction is the regal power. It is the crowning glory of human existence. Most thoughtful people will die rather than surrender to others this citadel. Thousands have preferred death to servitude, since nothing seems so degrading as unconditional submission to a human will.

It is not easy to surrender even to God the control of one's individuality.

It adds to the difficulty to know that for the sake of discipline and development he will probably lead us to just the work we most dislike, and hold us back from the things that we prefer.

A wise mother crowds out upon the playground the nervous, sensitive child that is forever poring over his books, while she holds to study the robust, roystering one who is always ready for anything that will take him away from his lessons. So, in his efforts to bring us to completeness of character, God will probably have to lead us directly against our inclination.

When called upon to place ourselves in God's hand we may have a premonition of this discipline that will make us draw back from the pain.

It may be helpful for us to glance at some of the specific points that come under this generic principle of self-surrender. Our wish to acquire property must be given to God.

The spirit of the world is wrong in its estimate of people, and God means to set it right. If he gets us in hand he will spare no pains to correct our false notions. He will make us understand human equality. He will give us to see that a few thousands of money, more or less, make no sort of difference with one's intrinsic worth, and in order to that it may be necessary to give us a view from the lower side of the scale of his standard of values. Some one has said, "God shows how little he thinks of wealth by the class of people to whom he permits its possession." His nobility, they of whom the world was not worthy, "were stoned, were sawn asunder, were tempted, were slain with the sword; they wandered about in sheepskins and goatskins, being destitute, afflicted, tormented."

If one is permitted to keep his property after accepting the divine will in the matter, he holds it no longer as his own, but always subject to the order of God. His sense of ownership is changed to a simple stewardship; so that, though he may not have to deed it away to a church or charity, it is as certainly given up as if it had passed out of his hands. All this implies an immense overturn of natural tendencies, and the uprooting of habits that are the growth of years. No wonder it is called a crucifixion, and that it seems like an actual losing of the life.

Closely allied to our desire for property is our wish to be *well spoken of*—highly esteemed. This also must be surrendered. And in it, as in the other points of character that have been shaped by general opinion, we may expect discipline. They said of our Master, "He hath a devil"; and he says to us, "The disciple is not above his Lord."

The crucifixion of self-surrender would not be so hard if we could suffer one great pang and have done with it; or if, in the submission, we might so lose our free agency as to be perfectly safe from ever drawing back unto perdition; or if we could look our last upon the temptations of the world, and shut ourselves up in some sweet, quiet cloister, where there would be only prayers and meditations and holy offices. But it is the plan of God that we shall present our bodies a living sacrifice, and any drawing back will

abate correspondingly our union with God and our deadness to the world.

And just here we note one of the paradoxes of the Gospel. We are never so fully and completely alive as when we are dead. We have never so fully the symmetry of character, the strength, the enjoyment, the assurance of living by the law of our being, the certainty of success, as when we have surrendered all to the Master.

When we are dead, and our life is hid with Christ in God, we are most keenly alive to every worthy interest, we have the most glorious fulness of existence.

And what is the life that we save by the losing?

It is primarily the spiritual life, and it depends upon union with God. The original life of the soul was forfeited by sin. Grace finds us dead in trespasses and sins, and renews in us the life of God. We live this life more or less affluently in proportion to our submission to the divine will and our trust in the atonement.

When, in the maturity of our Christian knowledge, we accept the will of Christ in all things, he will lead us not only to completed spiritual life; he will also give us the best physical and mental culture possible.

He will give us to understand that when our bodies belong to him, we must take care of them for him, and see that they subserve to their utmost the uses of the mind and spirit.

We will stop our fretting when we come to know that the investment and use of our powers depend, not upon our puny wisdom, but upon unmistaken, divine judgment. We will cast our care on him who careth for us: and with the care all taken off of the weak nerves, a little physical strength can be made to go a great way.

When our mental powers are taken completely out of the service of self and devoted simply and only to that of our Heavenly Father, we will comprehend not merely our privilege, but our duty to bring them to the greatest strength.

If God does not want consecrated thought to be developed in strength, why has he given us mental acumen above the simplest uses? Certainly the very best of everything belongs to him, and nothing can transcend in polish or strength the needs of his work.

To be sure, some who have poor grammar, false rhetoric, and limping logic are used to win thousands to Christ; but who knows how much more might have been done by the same faith and fervor in a richly endowed and well-disciplined soul?

Never were so many persons converted under one sermon as under that of Peter, the Galilean fisherman, fresh from the pentecostal baptism. Yet, afterward, that same Peter endangered the very life of the infant church by truckling to Judaizing teachers. Paul had to withstand him to the face, because he was to be blamed. His undisciplined mind did not carry him through the task of settling the tenets of the new faith. It was Paul, trained in the best schools, who was used of God to give the church its theology.

In the Anglican revival of the last century it was not the fiery eloquence of Whitefield, who came untrained from the common people, that organized the victory, but the quiet, steady, scholastic thought of Wesley and Clarke, with their broad erudition and profound culture.

We need not fear intellectual pride while we trust Christ to save us from sin. At all events, his salvation is our hope of immunity from that, as from every other wrong tendency. No amount of personal humiliation, penance, or mind-starving will have the effect to keep us humble in regard to mental ability. He alone is the deliverer from evil.

Above all, if we lose our life by surrendering it to God, we may claim and expect the most thorough discipline and complete development; possibly by processes not such as we would choose, but those that God sees best fitted to produce the result.

We will have to learn to be abased before it is safe for us to abound. It took eighteen years to bring Columbus to nerve and daring enough to enable him to discover America. John Bunyan preached like a son of thunder, his soul on fire with zeal for the salvation of the miserable masses. God permitted him to be shut up in Bedford jail for twelve long years. How his fiery spirit

must have chafed! The world perishing, and he utterly powerless to help and save! But the result of that burying of energy was the production of his wonderful book, which has acquired an authority and circulation next only to the Book of God.

Our saved life will be hid with Christ in God. We will look out upon the petty squabblings and ambitions of the people as the mere bickerings of foolish little children.

And what companionship would be ours "with Christ"! what a secure hiding-place —"in God"! Our "place of defense the munitions of rocks"! No care for the life that now is. Our "bread shall be given" us, our "waters shall be sure"! And for the eternal, the ceaseless life, our "eyes shall see the King in his beauty. We shall behold the land that is very far off."—*Jennie Fowler Willing, in "Diamond Dust."*

THE CENTRAL ELEMENT OF ORGANIZED MATTER.

BY L. H. BATCHELDER, A. M.

PROFESSOR OF PHYSICAL SCIENCE IN HAMLINE UNIVERSITY.

II.

NOT long ago a traveler found himself at one of the gateways of our great National Park with only a little time at his disposal. It would take many weeks—even months—to explore its more than thirty-five hundred square miles of natural beauty and to visit the great laboratory of inorganic chemistry—or rather series of laboratories — which nature has here still in active operation. Our traveler decided to take no hasty and wearisome journey, in the vain hope of getting a glimpse of every attractive scene, but took instead a little journey to a point of greatest interest, saw "Old Faithful" send up its mighty column, looked into some of the great crucibles where are ever being mixed the chemicals for strange compounds which nature is preparing down below, and by a new path took his leisurely and observant way from wonderland.

Last month we surveyed the borders of the greatest province of the domain of physical science, and may now only hope to take a little excursion into the fascinating country of the carbon compounds, returning, it may be, by a different path. It will be remembered that the possibility of a true understanding of the carbon compounds of organized bodies and their derivatives dates from the epoch-making discovery of Wöhler in 1828, the synthesis of urea. Yet chemists were not unprepared for this discovery. Many attempts had already been made to build up organic compounds from their elements, though hitherto they had proved futile. The chemists of that period had, nevertheless, says Professor Hofmann in his account of the life-work of Wöhler, "the presentiment that even this barrier must fall, and one can conceive the feeling of joy with which the gospel of a new unified chemistry was hailed by the intellect of that time. With the revolution thus effected in the ideas of men, science was directed into new paths and unto new goals."

Yet it was true in this case, as in many cases before and since Wöhler's day, that no great discovery in science is possible until the time is ripe for its advent. When that time arrives, some Lavoisier, some Dalton, some Wöhler is sure to win immortal fame. It is gratifying to be able to add that Wöhler lived to see some of the greatest triumphs of modern chemistry in the synthesis of organic bodies. Born in the year 1800, famous for his discoveries before he was thirty, he lived to a hale old age, beloved by his many thousand pupils, departing in 1882.

Reference has already been made to the derivatives of the hydro-carbons; the simplest of these are the halogen substitution products; the term halogen, meaning salt-former, is used to designate the principal members of the chlorine family—chlorine, bromine, and iodine—because of their

strongly pronounced tendency to form salts with the metals. If chlorine is allowed to act on marsh gas in diffused sunlight, at first one of the four atoms of hydrogen is displaced, then two, then three, and after a time all four; so that four distinct compounds are derived in succession from this reaction. This displacement of hydrogen by chlorine in organic compounds is an example of what is known as substitution. Most hydro-carbons are very susceptible to the influence of the halogens, as well as a number of other reagents, such as nitric and sulphuric acid. Thus a large number of derivatives can be made, differing from the hydro-carbons themselves in that they contain one or more halogen atoms, or complex groups, in the place of the same number of hydrogen atoms. A careful study of all the facts has led chemists to believe that the hydro-carbon group is not changed in any way, except that the place in the molecule of the atom, or atoms, of hydrogen is now occupied by the substituted atoms, or groups, which bear the same relation to the carbon of the molecule as did the hydrogen which has been turned out.

The story of the discovery of this law of substitution is quite worth repeating. One evening at a *soirée* at the Tuileries, during the reign of Charles X., the guests were greatly annoyed by the presence in the atmosphere of the rooms of acid vapors; these were observed to be due to the burning of the wax candles by which the rooms were lighted; the director of the porcelain manufactory at Sèvres, who by tradition was the royal adviser on chemical matters, chancing to be present, was asked to inquire into the peculiar behavior of the candles. Now this man, Brongniart by name, had the distinction to be the father-in-law of Dumas, then in the full tide of his chemical activity and already famous for his discoveries. Brongniart applied to Dumas for a solution of the difficulty. Dumas soon found that the acid fumes were due to the hydrochloric acid produced by the combination of the hydrogen of the wax with chlorine, which had been used for bleaching to whiteness the candles for the royal apartments.

This discovery led Dumas to study the action of chlorine upon organic bodies, with results which exerted a profound influence upon the development of organic chemistry; indeed, the substitution theory which he now advanced is comparable in importance to Wöhler's synthesis of urea. For one thing it destroyed the electro-chemical theory of Berzelius, according to which chemical combination is the result of the union of substances of different electric polarities. The electro-chemical character of an element, or compound radical, was held to determine its behavior and to influence the nature of the compound into which it entered. This theory was accepted by the entire chemical world prior to 1832. Such was Berzelius' eminence at this time that his opinions "had all the authority of legal enactments." But the chief glory of this doctrine of substitution is that it has been the progenitor of speculations by which the superstructure of modern chemical philosophy has been raised.

If we replace three of the hydrogen atoms in marsh gas by chlorine we have a substitution product whose symbol is $CHCl_3$; this is chloroform. It had been discovered by Gutherie in America in 1831, and later by Liebig, who, however, had wrongly interpreted its constitution. This was now correctly classed by Dumas as tri-chlor-methane, a substitution product. Chloroform readily dissolves many organic substances, and for this reason is largely used in analytical processes, and also for the purification of various compounds. It was first used as an anesthetic in 1848 by Sir James Simpson of Edinburgh. It has found much greater favor with the medical fraternity in Great Britain than in this country, where the use of ether seems in most cases to be more favorably regarded.

Iodoform is a substitution product closely allied to chloroform, the only difference being that three atoms of hydrogen have in this case been replaced by iodine instead of chlorine atoms. Since Lister's discoveries, iodoform has found a wide use in surgery on account of its antiseptic properties.

It was in 1832 that Dumas, in conjunction with Pélegot, published a paper on wood spirit, showing it to be analogous to common alcohol. Soon after they announced that spermaceti found in cavities in the head of the sperm whale yields a substance also akin to common alcohol—though containing a multiple of the number of carbon and hydrogen atoms in a molecule of that substance. The discovery of these alcohols ultimately led to the classification of organic compounds in the homologous series, discussed in the first part of this paper—a mode of classification which has been singularly valuable in leading to the discovery of substances which would otherwise have remained unsuspected. We also saw how in the methanes, carbon atom is linked to carbon atom in a simple chain, each carbon atom flanked by two hydrogen atoms, and the open chain terminating at either end with a hydrogen atom. But chemists found in many cases paraffins differing from each other in their various properties, yet, on analysis, proving to have the same molecular composition. After much research it was found that these molecular chains have, in some cases, branches and that the greater the number of carbon links, the greater the variety of ways in which this branching may vary. It was found also that with every variation a different substance results.

Thus having by analysis determined the number of carbon atoms in the molecule, it is easy to calculate the number of possible compounds having the same formula, but differing in their properties, because of variations in the arrangement of the molecules. For example, a paraffin having thirteen carbon atoms has 802 possible isomers, as they are called. We now know a paraffin with sixty carbon atoms in the molecule. The number of possible isomers of this single paraffin is enormous. Only the smaller part of the normal—*i. e.*, simple-chain paraffins from marsh gas, CH_4, up to hexacontane, with its symbol $C_{60}H_{122}$, are known, while a far smaller proportion of their possible isomers have yet been discovered. But there can be no doubt that all these predicted by theory can be prepared; nor is there any reason for supposing that no higher members in this series are possible, though it might be a relief to discover that there is some law limiting the number of complex hydrocarbons, for organic chemistry is already "overburdened with facts."

After the announcement by Dumas and his colleague, chemists began to study the nature of the evident connection between the hydro-carbons and the few alcohols then known. The closeness and true nature of this relation were only recognized after methyl alcohol—as wood spirit had been named by Dumas—was prepared from marsh gas, first, by forming its chloride, as already explained, and then treating this with potassium hydroxide, when methyl alcohol resulted. This reaction showed clearly that an alcohol is a hydroxyl derivative, and that the hydroxyl is linked with a hydro-carbon radical.

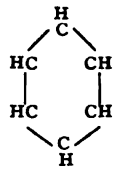
These terms must, for the sake of clearness, be here explained. The ideas involved in these terms, especially the latter, were long in assuming their present definite form. Over the notion of the radical many battles were fought, especially during the fifties — battles between the ablest chemists and clearest thinkers of the century. At last, in the early sixties, Frankland in England, by his beautiful researches, and Kolbe in Germany, by his acute generalizations and deductions, elevated what had hitherto been an hypothesis into the rank of known facts. A radical, then, is a more or less complex group of elements capable of passing from compound to compound without change, replaceable in these compounds by simple substances and having a definite combining power, or valency. A hydroxyl is such a group, containing one atom of oxygen and one of hydrogen. Methyl alcohol was thus derived from marsh gas by replacing one of its hydrogen atoms with this hydroxyl, its symbol thus being CH_3OH. If we replace in this way an atom of hydrogen in any of the paraffins, we have a monad radical linked with a hydroxyl, in the case of methane CH_4, of

common alcohol C_2H_6. These radicals have been called the alcohol radicals, because they have been extensively studied and are the starting-point of many other derivatives. The number of possible alcohols is much larger than that of the paraffins themselves. We now know more than sixty alcohols, and it seems certain that an almost unlimited number may eventually be discovered; not at first thought, perhaps, a pleasant prospect, but while a number of the alcohols already known are violently intoxicating, their properties are such as to preclude the possibility of their being used as a beverage in any form. Some are highly poisonous, while others are most offensive in their character. Still others are benign, like glycerine, which is a true alcohol.

On March 11, 1890, was celebrated a great fête, at which chemists of all classes and nationalities were represented. This great gathering was in commemoration of the twenty-fifth anniversary of the birth of Kekulé's benzene theory.

The name "aromatic compounds" was early given to a small class of bodies which occur in essential oils, balsams, and the like. They differ from the paraffins in containing relatively more carbon. In the course of time, many chemically similar groups were discovered, a number of them being found in coal tar. Though some of them were anything but aromatic, the general title "aromatic compounds" was extended to all these allied substances. No opinion was expressed concerning the constitution of these compounds until 1865, when Kekulé proposed a theory, which has had a marvelous influence on the development of both theoretical and technical chemistry—an influence so great that it was fitting its quarter centennial should be celebrated by chemists with feast and song and toast.

The "aromatic compounds" then known were seen to bear an intimate relation to benzene—a colorless, mobile, easily inflammable liquid, the molecule of which had been found to contain six atoms of carbon and six of hydrogen, C_6H_6. Kekulé's hypothesis was that the carbon atoms of the molecule are united in a simple *closed* chain or ring, each carbon atom having attached to it one of the six atoms of hydrogen. Thus:



These hydrogen atoms, like the four in marsh gas, are each in exactly the same chemical relation to the whole group and are each alike very susceptible to replacement by a monad element, or radical, no matter how complex such radical may be. In this way a vast number of compounds have since been built up by synthesis, many of them of the very greatest technical importance. Benzene may thus be called the marsh gas of the "aromatic compounds," as they are all derived from it by the substitution of elements, or radicals, in the place of its hydrogen. The linking of the carbon atoms to each other is regarded as more compact than in the paraffin chain molecules; this and the fact that the molecule is a closed chain accounts fully for the relatively small number of hydrogen atoms in the benzene group.

This hypothesis was subjected to the severest tests, all of which tended to confirm its correctness, so that now for more than twenty years it has not been disputed. As a result of its general acceptance, the benzene derivatives have since been more industriously studied than any other portions of organic chemistry. This will be more readily understood when we remember that not only all the natural, but all the artificial coloring matters, the most valuable medicines, the most potent poisons, as well as many other important substances, belong to this class. Some one has said, though with scant justice, that "the organic chemistry of to-day is the chemistry of the coal tar colors." When once the constitution of a naturally occurring substance is understood, the chemist now sets himself confidently about its artificial preparation. Alizarin, the chief constituent of madder, was the

first coloring matter, previously produced only by plants, to be prepared artificially. This was in 1868. Now madder, the annual production of which twenty-five years ago was 500,000 tons, is practically driven from the markets of the world, while hundreds of aniline dyes, derivatives of alizarin —itself a derivative of benzene—are more than filling its place. The synthesis of indigo has also been accomplished. Beyond doubt it is only a question of a short time when quinine will be added to the already long list of medicines artificially prepared. The commercial synthesis of sugar may also be looked for in the near future.

ENGLISH JOURNALISM.

BY MARY H. KROUT.

THE newspapers, daily and weekly, published in London could scarcely be numbered. Every political, religious, and commercial class has what in this country would be called its "organ." In politics, newspapers are Conservative, Liberal, and Radical; others are devoted to the Irish and home rule and the factions into which home rulers are again subdivided. Every parish of comparative wealth, or which is successful in securing the necessary subscriptions, supports a parish journal, and there are the great publications of the establishment at large.

In a great manufacturing country like Great Britain trade journals, ably edited and circulated all over the globe where iron or steel implements and machinery are required, thrive and multiply. Comic publications also receive liberal patronage, and, as a rule, they differ materially from papers devoted to the dissemination of humor on this side of the Atlantic.

The venerable *Punch*, of course, ranks first, and it is intended for the classes distinctly, and not for the masses. To appreciate it fully one must be able to read Latin at sight, for the ancient humorist never questions the culture of his public by enclosing in parenthesis the English rendering of lines from Virgil or Horace which he freely quotes. We shall have to have several centuries of Yale and Harvard before we attain this degree of general erudition. Then, one must be well informed upon English politics, English philanthropic methods, to say nothing of English social usages, which, while resembling our own in the essentials, will be found embarrassingly different in the non-essentials. Even with this basis of enlightenment there are many Americans who persistently declare "that they can see nothing in *Punch* to laugh at." It must be acknowledged that there is always a pronounced refinement in *Punch*; even its gamins and workhouse *protégés* hint—or more than hint —at a strong and active drawing-room constituency, and the caricaturists are generally satisfied with exaggerations of Mr. Chamberlin's eyeglass and orchid, Mr. Leckie's length of leg, and certain idiosyncrasies of the Rt. Hon. Sir Michael Edward Hicks-Beech and the Rt. Hon. J. E. Gorst, Q. C. They are, however, rather less vicious and, to speak with unpatriotic candor, considerably less brutal than the caricatures of men in public life which appear in our comic papers. Furthermore, the England which we depict as a stout, irascible beef-eater with side-whiskers and rubicund visage the English caricaturist practically discards. Britannia, a noble, stately woman in classic robes with shield and trident, with the conquered lion crouching at her feet, is substituted for the doughty John Bull by which we invariably typify the British Empire.

Of other English comic papers the less said the better; the drawing is generally fairly good but the accompanying legend is distinguished for little else than an Elizabethan frankness of speech.

All the newspapers of the United Kingdom, and even those of the colonies, aside from Canada, which are hopelessly Ameri-

canized, are apparently patterned after the great newspapers of London, most of which have been in existence for generations and are led by men who generally hold unswervingly to the political faith of their forefathers. This, however, is not always true, for, within the past decade especially, there have been some notable departures from political and religious traditions—the twentieth-century Englishman being more and more disposed to act and think for himself. The London daily newspaper best known abroad and formerly most widely read at home was the *Times*, which, for its force and power, obtained the title of "The Thunderer." For reasons which need not be discussed here this great journal no longer exerts the influence which it wielded thirty years ago; it is still ably edited and is conducted with that dignity and decency which characterize the tone of every English paper of worth and standing. It is dedicated to the imperial idea, and has devoted much energy to colonial expansion, and more than all, so far as it affects us, has taken the lead in the matter of furnishing its readers with American news. No matter how mistaken the opinions of its American "commissioner" frequently are, the *Times* has been disposed, for the last three years, to give as much space and importance to American matters as to affairs in the lesser European countries. It is, no doubt, influenced largely by questions of interest, some billions of English capital being invested in American securities which are affected by political changes and our ever-threatening legislation.

The *Standard* is the great Conservative organ, the stanch supporter of Lord Salisbury. It has been his loyal friend since the hour he was first called to his high office. Strangely enough, we must turn to the *Standard*, ultra-conservative as it is and perforce having very little sympathy with democracy, for the fairest and most unbiased estimate of America and Americans. It rarely reproaches us and never abuses us; in its leader upon the election of President McKinley and the return of the Republican tariff party to power it even went to the length of admitting that if this country "opposed free trade, that was its privilege, and that protection was not a political crime." One finds, on the other hand, a good deal of animosity toward not only this economic measure, but other American ideas in both the Liberal and Radical papers where one would scarcely look for them; but that may be explained, possibly, on the ground that the *Standard*, really representing the leisure classes, has not so much involved in its defense or opposition of American revenue measures, while the latter are chiefly supported by the commercial and laboring classes, whose incomes and wages depend largely upon the great markets of the United States.

The *Daily News* is the paramount Liberal organ—the maker of Mr. Gladstone and the never-ceasing propagandist of his political and economic theories. It stands for the "great middle class," the bone and sinew of the empire; for the powerful body of non-conformists, "the sects" as they are contemptuously called by ultra churchmen, as opposed to the establishment. For the past three years it has kept a sharp eye upon the present government, paying especial heed to the premier's public utterances, which, great or small, it dissects without mercy. It was one of his severest critics in the attitude of England toward Armenia and held him and his ministry largely responsible for Turkish success in the conflict with Greece. It was a marked contrast to the *Standard* in the vigor with which it denounced the Transvaal conspiracy of Cecil Rhodes and his facile tool, Dr. Jameson.

The *London Daily Chronicle* is devoted to the advancement of a mild type of radicalism. It is the mouthpiece of trades unions, and, while occasionally rather bitter toward the United States, is ordinarily progressive and enterprising without being blatant, egotistical, or vulgar. In these three essentials it is a marked contrast to Labouchère's *Truth*, a weekly journal largely read by discontented English butlers and *valets*, and rivaling Argos in the number of its "I's." In all its progressiveness, however, the *Chronicle* draws the line strictly at the participa-

tion of women in politics—a contrast in its position upon this important question to the liberality and justice of the *Daily News*. One of its editors, Mr. Henry Norman, is the well-known writer upon the problems of the far East, and his letters from Washington during the Venezuela dispute were the most correct and unbiased reflection of real American sentiment that appeared in any of the great London dailies at the time.

The *London Morning Post* is the English society journal preeminent. While it discusses national and international questions ably and at length, quite as ably—and as lengthily—as any of its esteemed contemporaries, and while its foreign and domestic telegraph news is equal to that of any other London paper, at the same time it is universally recognized as indispensable to those who wish to follow the tide of fashion. Its court news is full and minute, nor is its record of great London or county functions less abridged. Where other journals give a drawing-room or the Duchess of Devonshire's costume ball a "stick full," the *Morning Post* devotes to its splendors not less than two columns.

It is to its credit, however, that the *Morning Post* has never acquired our "Wild West" impressionist style of slashing on compliments with a whitewash brush, praising the graces of the debutante, describing the mundane glories of the multi-millionaire with every superlative possible to the English language. One can read its society notes, dull though they may be, evincing accuracy of statement rather than redundancy of imagination, without experiencing a qualm or turning giddy.

The *Daily Telegraph*, which its enemies charge is "all things to all men"—splendidly Liberal when Mr. Gladstone was at the helm, gushingly "loyal" when the Conservatives are in power—was probably the first paper to attempt anything approaching American journalistic methods. The result has been a curious mixture of adherence to staid English traditions with American flippancy, irreverence, and emotion. It reminds one, somewhat, of a matron, stout, unwieldy, and no longer young, skipping and jumping about and talking in the thin treble of a schoolgirl. It is enterprising and "gets the news," especially that gossip and odd bits of sensationalism which we are wont to dignify as "news." Its leaders have a literary style peculiarly their own, and they illustrate what twenty or thirty years ago used to be called "fine writing." So generally is this recognized that an English author describing a character in fiction said that his language was a mixture of "Bible and *Daily Telegraph*."

The *Daily Mail* has surpassed the *Telegraph* in its adaptation of American models. It is bright, interesting, as sensational as anything English can be where convention is in the air that even editors and publishers breathe. It makes money and it spends it in all sorts of quasi-benevolent and public-spirited schemes. In this, too, the *Daily Telegraph* is an energetic rival, and with both, the inspiration of the scheme and the mainspring of the idea is self advertising, whether it be the wholesale distribution of Christmas boxes among the crippled children of the East End, or the fitting out an expedition to discover the north pole. With all their energy and exercise of ostensible benevolence and public spirit when it will induce the speediest and largest cash returns, both papers are frankly vulgar. The *Mail*, especially, seems to have taken as its pattern two degenerate New York daily papers, which, incredible as it may seem, since the English are merciless censors of "the sensational American press," are probably better known and more widely quoted in London than any other American newspaper, notwithstanding their absolute lack of standing and influence throughout the United States.

There is a great number of society journals, of which *The Queen* ranks foremost. This is patronized by the court and, although it somewhat inconsistently gave much space to the reactionary utterances of Mrs. Lynn Linton and Sir Walter Besant, it is extremely broad on all matters pertaining to the so-called "woman question," and is a fearless and strong advocate of the par-

liamentary franchise for women, to which the Liberal party has pledged itself. Its former editor, Miss Lowe, who died in 1897, was a woman of great intelligence and marked executive ability, and the editorial columns of *The Queen* during her *régime* reflected these qualities in a marked degree.

Americans are apt to complain that London newspapers are very dull. It is certainly true that they give very little space to crimes and casualties—unless the latter is something quite out of the common, like a railway accident where several lives are lost, or a catastrophe like a great fire in the East End. An account of a murder in the more conservative papers is made as brief as possible; an execution is disposed of in a few lines, which briefly set forth the fact that "the sentence of the law was carried out this morning in Newgate." In one respect it must be acknowledged that the English newspapers, not only those of London but of the provinces, set an example that the journalism of every civilized country might follow with profit. This is, that, assuming legal cases to be tried in the proper courts, they refrain by common consent from publishing any editorial opinion or comment until the verdict has been rendered and the defendant acquitted or condemned. They tacitly agree that the law, referring the case to the proper tribunal, should not be obstructed or embarrassed by any attempt to sway the public mind. And in conformity to the Anglo-Saxon privilege of freedom of opinion the evidence, stenographically reported, is published in full from day to day, and the people are thus kept informed without prejudice. When the case has been concluded there is then the fullest review and discussion of the proceedings from beginning to end, but not until then.

What is called the "make-up" of the leading daily papers in London is almost uniform. The first column on the outside page is devoted to deaths, births, and marriages in this order. Beneath the last there are usually two or three paragraphs under the head "In Memoriam," and these, characteristically English, appear in every English newspaper from New Zealand to Land's End. The paragraphs are announcements of the death of persons who have passed away on that date several years previous; the name and age are given, and the paragraph concludes with some appropriate quotation, or the brief, touching words, "deeply regretted," "bitterly mourned."

In the second column—for the entire outside page is devoted exclusively to advertisements — are the "Personal, etc." This, too, is a curious reflection of British customs and manners—a jumble of tragedy and comedy, of business enterprise and impassioned appeals for charity—sometimes deserving and occasionally the reverse.

In addition to ostensible personals addressed to "Dearest Madge" or "Darling Flossie," which are clumsily constructed advertisements, crude and amateurish compared to consummate American art in the same direction, there are heart-broken appeals of parents to recreant sons and daughters, imploring them to come home, that "all is forgiven," or "the matter has been hushed up." There are less frequent official acknowledgments of conscience money, refunded anonymously by persons who, in one way and another, have temporarily defrauded the state of its lawful dues. These sums rarely exceed £10 or £20, and, occasionally, are only a few shillings. One is tempted to the cynical reflection that, if the sums were larger, the conscience possibly might not have been so sensitive, or the desire for restitution so imperative. The advertisements of shipping are always most interesting—the sailings and clearances of vessels from every port of any importance on the globe. One realizes what a vast net-work of complicated and varied interest British commerce has grown to be; here are steamers bringing cargoes of beef and grain from the vast plains of Argentine; beef and mutton from Australasia; sugar and spices and fruits from the Indies, East and West; fish and oil from the North; gums, ivory, feathers, and wines from Africa, with enormous imports of foods from our own country.

The editorial columns are divided re-

spectively into "leaders" and "leaderettes," which we classify as editorials and paragraphs. The leader is the heavy artillery of English journalism—and heavy it is apt to be in more senses than one. It has many of the qualities of permanent literature; its rhetoric is usually faultless, and whatever it discusses is presented clearly and with varying vigor. It is generally directed, offensively or defensively, against the movement or episode, national or international, which happens to be engaging public attention. Frequently—much more frequently than with us—literary and scientific questions are made the subject of lengthy leaders, and these are not written "in the office," but by experts. Many of the most eminent English writers are employed upon the editorial force of the great London newspapers, men like the late James Payn, Edwin Arnold, and Andrew Lang. The leaderette is in lighter vein, and those who affirm that the English nowadays are destitute of humor are not familiar with this department of British journalism. It lacks the stab and sting of our paragraphing, and where a reproof is to be administered or ridicule is demanded the leaderette reminds one of a sharp box on the ear. The writers of both leader and leaderette follow the polite example of *Punch* and never translate their frequent Latin quotations. Verbal encounters with an antagonistic rival are extremely rare, and when they do occur there is no personality and no abuse; the reproof, the denial, or accusation is always couched in dignified language, and the esteemed contemporary is condemned in a manner that leaves nothing to be desired—on the part of his opponents. There is no doubt but the severity of the English libel law and the certainty of recovering heavy damages for their infringement have had much to do with the impersonal and moderate character of British editorial differences.

Telegraphic news, though varied, is extremely concise; details are given sparingly and with discretion. For this, too, there is a reason, as was illustrated not long ago when an English news agency was sued by a leading London daily paper and made to pay heavy damages for "padding" telegrams during the Japanese and Chinese War, the accuracy of the telegrams having been publicly questioned by the readers of the paper. There is no poets' corner in the English daily papers, and one wonders where the local poet finds a vent for his teeming inspiration. On great anniversaries each paper publishes a lengthy ode or lyric by a poet of recognized reputation, and competition in this direction becomes almost spirited. The Queen's Jubilee was such an occasion and the contestants for the first place were men like the poet laureate and Kipling, all of whom were surpassed by the noble tribute of Miss E. Nesbit.

The real brilliancy of the London daily paper lies, without doubt, in the domain of criticism, and many of their art, musical, dramatic, and literary critics may be fairly regarded as high authority. They are not very lenient toward incompetency or mediocrity, they have never acquired the faculty of administering justice with mercy, and their ordinary disapproval seems often merciless to the extreme of cruelty. We frequently complain of their severity in passing sentence upon American matters which they do not understand, but those familiar with their habits are aware that they are just as exacting and even more unsparing among themselves.

The leading evening papers are the *St. James Gazette*, which is pronouncedly Conservative; the *Pall Mall Gazette*, which pursues a medium course, and the *Westminster Gazette*, printed, for some occult reason, on green paper, and boasting the best illustrations of any daily paper in London except the *Daily Graphic*, which makes an especial feature of its illustrations, and to which its printed matter seems a secondary consideration.

None of the great dailies have introduced illustrations, and the *Mail*, which employs them sparingly, recently declared that they added little to the influence or value of the paper. It must be admitted, however, that as illustrators the English are vastly behind us. They neither draw so well nor are their engravers equal to ours.

This statement is made in full recognition of the fact that some of our best so-called American draftsmen and engravers have been of English birth. As to individual writers, aside from the critics, staff correspondents, reporters, and others, their work is, intrinsically, no better than that of our own countrymen and country-women; but they have the great advantage of an editorial policy behind them that does not demand many of those tasks that are so hateful and humiliating to newspaper *attachés* in the United States. Interviewing, frequently hatefulest of all, is still something of an innovation. It must be admitted that when the English break the bounds of their ancient, hereditary reserve they have no equals in the frequency with which they use the personal pronoun. In an interview, for example, the remarks of the interviewed may be, under such circumstances, in about the proportion of three paragraphs to one in which the reader is treated to the personal views and observations of the interviewer.

The Sunday newspaper is practically unknown in England. It may be said to have no existence at all in the provinces, and in London with two or three theatrical and sporting journals, the *Weekly Sun*, the personal organ of T. P. O'Connor—"Tay, Pay," as he is called—and the *Sunday Times* are the most important. The latter, which has no connection whatever with "The Thunderer," is a small, Liberal paper, giving very good telegraphic news, fine criticisms of books, music, and plays, and there is an interestingness and brilliancy in its editorial page—where very short leaders only appear—that give it some semblance to our best American newspapers. It is said to be very successful financially, and it is owned and published by a woman.

The Queen's Jubilee was the opportunity of the century for the whole English press, in which London, perforce, took the lead. One was moved to admiration by the manner in which that great occasion was covered—a medley of magnificent social functions, of deputations, of processions and unusual interchange of diplomatic courtesies. It was superbly done—accurate, interesting, systematic; not too much of one important phase, nor too little of another. It was as concise as it could be, showing not only high intelligence and executive ability on the part of those at the head, but the most perfect discipline, ability, and willingness on the part of their subordinates. It was the high-tide of English newspaper achievement.

(End of Required Reading for January.)

THE SNOW-STORM.

BY CLINTON SCOLLARD.

FROM out the north last night a spirit came
Waving a wizard wand. This morning, lo,
An immeasurable vastitude of snow
Setting the earth as in a flawless frame!
From hill to hill the landscape seems the same;
The wandering rillet half forgets to flow;
Like pilgrims, standing in a solemn row,
The druid trees the sorcerer's power proclaim.

How silently this white magician toils,
His feet as noiseless as the feet of Time
Whose snows, relentless and remorseless, cling;
We may escape this necromancer's coils
When Spring unlocks the fetters of his rime.
Will Time thus yield to an immortal Spring?

SHOOTING STARS.

BY O. F. BIANCO.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE ITALIAN "NUOVA ANTOLOGIA."

THE phenomenon of shooting or falling stars is well known. A brilliant point starts out of the heavens; it rapidly traces its way through the field of the constellations and quickly disappears without leaving behind it any track or trace. The apparent road of these resplendent points, which sometimes are followed for the moment by luminous trails, forms ordinarily the greatest possible arc of a circle in the celestial sphere. This arc occasionally winds about with sharp changes of direction, or sometimes even reenters itself. In olden time it was the belief that shooting stars, as Milton says in his lines on the flight of Uriel in "Paradise Lost," showed

> the mariner
> From what point of his compass to beware
> Impetuous winds.

Recently there has been an attempt to revive the idea that falling stars exert an indirect influence on temperature, especially in cases where the temperature falls, as in the first fortnight of February or May. The advocates of this notion would have us believe that certain groups of shooting stars intercept a part of the sun's rays as they pass between the earth and the sun, so that a noticeable cooling of the atmosphere is a result of their course, a cooling which is felt by scientific instruments, by men, animals, and plants.

There are times in the year when shooting stars are more numerous than at others, as the 12th, 13th, and 14th of November and the 10th, 11th, and 12th of August. It was formerly calculated that the groups from which these come pass between us and the sun on May 11 and February 7 respectively. Now it happens that toward May 11, and precisely on the 10th, 11th, 12th, and 13th of that month there is a noticeable and well verified lowering of the temperature in Europe north of the Alps. For this reason those days which are sacred to Saints Mamertus, Pancras, Servadius, and Boniface have given the name of the "saints of ice" to their patrons, the "Eisheiligen" of the Germans. But nowadays this belief is no longer upheld by sober demonstrations. The "saints of ice" are explained by the general laws of atmospheric movements, and it is proven that the shooting stars have nothing to do with them. The same conclusion will doubtless be reached regarding the lowered temperature in February.

Falling stars may be seen every night in varying numbers. Sometimes they amount to a genuine rain of fire, the return of which at fixed periods has constituted a serious astronomical problem. But it is a problem which was solved some thirty years ago by the well-known astronomer G. V. Schiaparelli. He showed the connection between falling stars and comets, and subjected them to the laws of celestial mechanics, which it was previously doubted whether they obeyed. The earliest observations on them are found in China. The observers of the Celestial Empire have preserved and handed down in their records many descriptions of these phenomena, noting the times they occurred. By these records we can arrive at the periodicity of some of these apparitions. The records begin with the year 687 of the present era and have been continued down to the present day by the astronomers of the court of Pekin, a part of whose constant duty it is to see whether anything hostile appears in the heavens. But only those antecedent to the year 1647 have been published, owing to the honored custom in China of not making the annals of a dynasty public until the dynasty is extinct or no longer possesses the throne. On the other hand, Greek and Roman antiquity furnishes but little data and these are to be

found only in the descriptions of portents such as Livy presents. The chronicles of the Middle Ages and the writings of Arab authors are full of notices and descriptions of showers of stars, and several erudite astronomers have derived from them abundant catalogues of meteoric apparitions. Naturally these extraordinary phenomena were attended by many explanations on the part of the recorders, who looked upon them as sad forerunners of misfortunes and scourges. An old tradition of the sibylline oracle which was preserved by Christianity implied that the end of the world was to be accompanied by a falling of stars. As a Byzantine chronicler of the winter of 762–3 narrates (the Black Sea being entirely frozen over): "In March the stars in heaven appeared to fall and all who saw it believed that the end of the world had come."

In olden times also it was thought that falling stars were the souls of the dead whose thread of life had been cut short by fate. This was in Europe, for the Arabs believed that they were flaming stones thrown by the angels at the heads of devils when the latter approached too near to heaven. The Koran reproduces this opinion, which it found scattered through all the regions lying under the influence of Islamism, and consecrates it to a certain extent. Savage tribes possess coarse conceptions of the phenomenon. Other peoples are more poetical. In Galicia there is a legend which sees in each falling star a sprite. If the star falls to earth it becomes a lady of the rarest beauty, with tresses, long, blond, and scintillating. This beautiful creature exercises a magical charm on all who behold her. In the silence of the night she embraces them, until she stifles them in her embrace. But a certain formula conjures the peril if murmured at the moment when the star blazes out. And we Europeans still say to-day among ourselves that if we can express a wish between the blazing and the extinguishing of a falling star that wish will be granted.

We have already said that the number of shooting stars on certain nights of the year is considerably greater than it is on others, as, for instance, August 10 and November 14. The August fall lasts several days, reaching its maximum about the 10th, the November fall being at its greatest toward the morning of the 14th. These maximums are noticed every year, but the intensity itself of the phenomenon on these dates is subject to a certain periodicity. The most remarkable of the returns of the star showers is that of November, for which the calculations of Professor Newton give a maximum every thirty-three years and a quarter. The last of the maximums was observed in the year 1866. The next is therefore due at the end of 1899.

The November shower is accompanied in its celestial course by a small comet which was discovered in Italy by a German astronomer, Tempel, eleven months before the corresponding shower of stars in 1866. The last time this comet approached the sun it passed about fifteen million kilometers distant from the earth. It is not probable that it will come any nearer in 1899. On the contrary, there is some reason for believing that it will be farther away. In spite of this scientific assumption a famous weather prophet, Rudolph Falb, has announced that on November 13, 1899, between the hours of two and five in the morning the earth will dash into Tempel's comet and will be destroyed by it. If this contact does not take place, Falb shrewdly adds, we shall see on that morning such a shower of falling stars as never yet was witnessed.

The lack of any good reason for believing there is any danger in a collision of the earth with a comet is well understood. But popular faith refuses to be shaken, and some years ago Schiaparelli found himself obliged to send quite an extensive reply to a German editor who had questioned him regarding the likelihood of Falb's prophecy coming true. The substance of this answer was that the comet's curve had been quite carefully calculated in 1866, and also what part of its curve was nearest the earth's orbit. Now if we knew the exact date in the comet's return (which ought to be some time in the year 1899) when that particular part of the curve will be reached by

it, it would be possible to determine whether the comet will meet the earth. But we cannot know this for the reason that we do not exactly know the duration of the comet's revolution around the sun, beyond that it is thirty-three years and some months. The uncertainty may amount to several days, or even an entire month. The earth, of course, could come in contact with the nucleus, or head, of the comet, but we have as yet no data to show that it will.

It is probable, however, that in the year 1899, or before, the earth may enter into the meteoric current which accompanies that comet with the resulting showers of meteors, but in 1899 the comet's orbit will be closely examined so that we may hope to determine with greater exactness the duration of its revolution around the sun. Successive returns of the comet will give increasing exactness to these calculations, so that eventually the earth's inhabitants may be fully informed of what to expect from their celestial visitor. But at present there is no foundation, in science at least, for Falb's prophecy. Other astronomers, such as Weiss of Vienna and Forster of Berlin, have expressed their agreement with Schiaparelli on these points.

So much for the recurrence of the November showers and the time of their maximums. For the August meteors there appears to be a time maximum of one hundred or one hundred and ten years. There are also many other seasons of the year when the number of shooting stars exceeds the normal, as the astronomical almanacs show. In every shower of stars it is noticed that all their trajectories diverge from one and the same point in the heavens, and scatter in all directions. This point or space, called the "radiant," follows the celestial sphere in its daily motion. The existence of this "radiant" is a result of the perspective, but it is a complex result, caused by the movements of the earth and the motion of these little bodies. If you travel by rail during a rainstorm the drops always seem to fall obliquely, even though in fact they may be falling straight down. Under the same conditions you would attribute to the clouds a direction they do not have, but one which results from their velocity and your own. If the radiant of a shower should be a fixed point, while the earth is traveling in its orbit, the radiant would be in that constellation toward which the course of the earth was at that moment directed. But of course the radiant is not a fixed point and the showers seem to come from other directions. For the meteors of the 10th of August the radiant is found among the constellations of Perseus and Cassiopeia, hence the name of Perseids for the meteors. Besides, the 10th of August is the festival of St. Lawrence and the falling stars are therefore popularly named the Tears of St. Lawrence, alluding to his martyrdom on a gridiron. The meteors in November have a radiant in the constellation of Leo, and from it are called Leonids. Schiaparelli estimates the number of radiants in the entire sky at about 1,500. Some 1,490 have been actually observed in the past ninety or a hundred years, and an English astronomer, Denning, claims that the number would rise as high as 3,000. But the existence of many of these radiants depends on too small a number of observations. There seem to be very few in the southern hemisphere of the heavens.

The existence of a radiant which shares in the daily motion of the celestial sphere, together with these returns of showers at fixed epochs, does away entirely with all the theories that seek to attribute such phenomena to causes existing in the earth's atmosphere, as formerly was held by the best astronomers. Shooting stars are not visible in planetary or lunary spaces, and are not set on fire until they reach the highest regions of the atmosphere, at elevations which range from a maximum of two hundred kilometers to a minimum of fifty. Their velocity varies from seventy to sixteen kilometers a minute, those of November being considerably swifter than those of August. The substance of which they consist is compact and solid, and their weight does not exceed in general some fractions of a gram, only in rare cases reaching the weight of a few grams. These

data, however easily and shortly they are announced, are the result of long, numerous observations and minute and complicated calculations. On account of the resistance which the air opposes to the rapid motion of these bodies such a heat is produced that they burst into flame. This combustion is the origin of the light which the meteors show. To this light was applied the powerful methods of spectrum analysis, which revealed in shooting stars the presence of sodium, magnesium, and iron. The August meteors are different in color from the November ones, and in these as in all the meteoric displays of the year are seen stars of varying size and color, depending on the substance predominating in each.

Showers of stars are therefore produced by groups of small bodies moving about in space. Now since the so-called showers are repeated each year at the same epoch with greater or less intensity, it amounts to saying that when the earth reaches the same point in its orbit there must always be at that time and in that place new bodies of meteors. This cannot be explained except by admitting that long currents of such bodies exist in space, and that these intersect the terrestrial orbit at various points, thereby producing the different meteoric showers of the year. These showers will be more or less abundant, according to the greater or fewer number of bodies at the different points of the varied currents. And inasmuch as stars fall every night and from all parts of the heavens, we conclude that interplanetary space is traversed in every direction by such currents of cosmic bodies. And since the phenomenon of shooting stars has always been observed, occurring to-day as it did many centuries ago, and since the earth follows the sun in its movement through stellary space, so we deduce that the same thing has happened through all the regions of space that are traversed by the solar system.

Each of the innumerable little particles which constitute each of these currents is like a minute planet. Attracted by the sun, it describes an elliptical orbit around it and follows it in its great journey through space. The particle which precedes it and that which follows it do the same. So these cosmic aggregations are like streams of solid bodies, dragged forever through space, just as all the other stars. And they are subject to the same laws. And by this reasoning we are led to a sure and wonderful conclusion. We can imagine that in the space which surrounds the sun, up to the very limits of the solar system, there are countless streets traced, intersecting one another or not, like so many elliptical tracks in a race course, and on these streets, these celestial highways, move in perpetual procession the cosmic particles of the different aggregations, pursuing one another without ever attaining their goal. As they reach the perihelion they move faster, and more slowly as they go toward the aphelion, giving an account of their existence by becoming inflamed in our atmosphere whenever the earth's attraction draws them into it. As these bodies fall on the earth in immense numbers, so they fall on the other planets, on their satellites, and on the moon and sun.

An observer who scans the heavens with a free horizon sees from fifteen to twenty shooting stars every night, on the average. These with the naked eye, of course. If he should be watching for them with a glass which would magnify only sixty times he would see two hundred and sixty times as many, an amount which would reach the respectable total of about sixty billions a year for the whole earth. Compared with the dimensions of the solar system the earth is a very small body. Hence, one may judge of the lavishness with which these cosmic particles are strewn through space. To these shooting stars which fall periodically or otherwise (that is, sporadically) we must add those stones which now and then fall from the sky on the earth and which are called aerolites. So we may assume that our earth is bombarded by an incessant rain of large and small bodies, just as all the other worlds of the solar system are, and it is clear that these bodies increase its size and mass, but to an amount which reaching through ages is wholly insignificant.

The present state of science does not admit yet of our knowing whether the contact of the shooting stars and aerolites has had any effect at all on the earth's motion. But we can assume that in the process of time the amount of shooting stars and meteors will decrease. For any given group of the former it is almost certain that it was once more conspicuous than it is to-day and that it is growing less as the periodic returns pass on. Of course in this assumption we must take into account variations of density at different parts of the steadily moving current, variations which can produce showers that are now more dense and now more sparse. For this reason the constant enumeration of shooting stars becomes quite important, since this alone will teach us in the long run whether or not the phenomenon is really losing in richness, and if it is to what degree and under the sway of what laws.

When a shooting star breaks into flame in our atmosphere, the residuum of the combustion remains in the air, and can be found in what is known as atmospheric dust. The virgin snow of the polar regions was often seen to be spotted with traces of dust which contained particles of iron. Like particles are found on church towers and elsewhere. Among the minute bodies that dance in the sun's rays there are certainly particles of shooting stars. The sands of the African deserts when examined by a microscope present traces of very small iron particles which seem to have been subjected to a high temperature, and the *Challenger* on its remarkable trip in the Atlantic found at times in its drag-net fragments of magnetic iron which we have every reason to believe fell from the sky. Sir William Thompson (Lord Kelvin) and Richter have even seen in the aerolites the disseminators of the germs of life throughout the universe.

THE YUKON COUNTRY.*

BY THE RT. REV. P. T. ROWE.

BISHOP OF THE EPISCOPAL DIOCESE OF ALASKA.

ALASKA, as you know, has attracted the attention of the world, and people from nearly all countries have been finding their way to it. The year 1897 will go down in history as the year 1849, and we who have been here or come here during that time will, as the "forty-niners," be called "ninety-seveners." If you stop and think of the surprising population in Dyea, Skaguay, Dawson, and St. Michael, and remember that up to August, 1897, only the latter had any sort of an existence, you will have an evidence of the great multitude which have been drawn to Alaska. Dyea and Skaguay are the doors through which this throng has passed to the interior, and have respectively a population of five and eight thousand.

Two or three sea-going vessels were the usual number that entered the harbor of St. Michael in previous years. This year, at the time of my visit, I counted twenty-seven large ships lying at anchor and waiting to be discharged, to say nothing of the very many river steamers and harbor lighters which filled the bay and presented an array of shipping which could scarcely be equaled in the harbors of San Francisco or Seattle. The shore, which, like an arc, forms the bay, was lined with houses, warehouses, two splendid hotels, tents, boats under construction, and a moving mass of humanity, presenting a scene almost incredible.

The route indicated by me last year as the one which would naturally and easily become the popular one to the Yukon was the one by Skaguay and the White Pass or Dyea and the Chilkoot. This has already been demonstrated to be right. The route by way of the Stickeen and Lake Teslin

* This abstract of a lecture delivered at Sitka, Alaska, September 14, 1898, is published through the courtesy of the editor of *The Alaskan*.

can never be a contesting one with that by Skaguay unless a railroad is built for 150 miles to connect the watercourses. The Dalton trail over the Chilkoot is easy for the man who travels light and can afford to use horses, but for the miner with a year's outfit there is but one way—through Skaguay or Dyea. It is only twenty-five miles from tide-water to the lakes on the other side of White and Chilkoot Passes. That is a comparatively short distance in which to pack and sled an outfit, rendered cheap and easy now by reason of Brackett's macadamized road, the railroad now building, tramways, and excellent pack-trains. Once the lakes beyond the passes are reached, the miner can build his boat, put in his outfit, and travel easily down the great watercourse of 2,000 or more miles, if he chooses, transporting from one to ten tons, and without touching it again unless he chooses for the sake of safety to portage some of it at Miles Canyon and White Horse Rapids.

Since I went in this spring three steamers have been built which now run in from Lake Bennett to Dawson City in a few days and people can go and come by means of these in a short time. However, it is possible to leave Skaguay and reach Dawson in seven or eight days. The return trip will take twelve or more days. I am not going to take up your time with a description of the White and Chilkoot Passes. Suffice it to say that the former is easy and safe, and with the present facilities of transportation you can get into a wagon at Skaguay and ride all the way to Lake Bennett. This is called "the rich man's road." Chilkoot Pass is steep and is called "the poor man's pass," because with the tramway facilities you can get your outfit put over a few cents cheaper than on the former. On account of the calamitous snowslide which occurred this spring near the Chilkoot Pass, people are very apt to consider it a dangerous route, and this may be true; avalanches may occur under certain conditions and people may be caught by them, but a little good sense will enable them to avoid the same. This year I found the climb of Chilkoot made easy from the fact that steps had been cut up the steep incline. It is steep—so much so that the face of the ascent seemed only a few inches from the chest. I passed up during a snow storm, and when I reached the summit or a little on the other side a wonderful scene was disclosed. There, in a confused throng, mingled over 2,000 men, sleds, dogs, etc., indiscriminately. A long line of loaded sleds waited in turn to go down. A man with his loaded sled would start; all waited until he reached the bottom, which he did guiding his sled, more often the sled guiding him, and then at the bottom sled, man, and dog would pile up in a mixed condition, while eager and willing hands would try to find the man. The noise and confusion were startling.

We found the trail from Crater Lake to Lake Linderman good. At the latter place we found a veritable town of white tents. Two years ago I did not see a hut or cabin here. Now there is a population of 8,000 or so, an alert, eager, pushing, but good-natured crowd. It is four and a half miles across Linderman to the cañon which joins it with Lake Bennett. As I mounted the last hill, there stretched far away beautiful Lake Bennett with the high mountains on each side, and at my feet another town in this wilderness of some 15,000 people. I wandered through this place for two hours before I could find a suitable place to pitch my tent. It was a busy scene, stores, saloons, "bunk-houses," police quarters, log cabins, tents galore making up the place. There is a saw-mill here and lumber sells at twenty-five cents per foot; it is only fifteen cents at Circle City. Small Yukon boats are built for prices varying from $100 to $500. I saw one of the three steamers for the lake and river route on the way. It seemed to be 100 feet long by 15 feet beam. I spent Sunday preaching to 150 men or so. The ice was bad but I determined to "mush on."

Down the lake on the south shore the tents were so numerous that you could hardly throw a stick without striking one. While going down this lake we heard what seemed a far-off roar like thunder and look-

ing to the north shore of the lake there the very mountain seemed to be moving. It was a snowslide, a mile, I should think, in width, and it was terrific in motion, force, and noise, pushing itself nearly a mile from shore upon the lake. The first day we made seven miles, but the sledding was soft, the sun hot, and hauling 450 pounds took the heart out of one. We camped, started at 3 o'clock next morning, made the foot of Lake Bennett, where we found the river open and the shore snow gone, descended it until we struck the ice and snow, then on we went, making twenty-two miles that day and hauling 450 pounds.

Next day we passed Caribou Crossing, struck out on Tagish Lake, passing the boisterous Windy Arm, into which the winter trail from Skaguay, called the "Tuh-Shei," enters. This trail makes a saving of twenty miles, but is only passable while the ice and snow last. We made the foot of Tagish Lake, twenty-six miles, that day. Here Five Mile River was open and we had to go into camp and build our boat. I picked out the trees, cut them down, topped them myself, marked them out, rolled them from the woods and out upon a saw-pit, which we had prepared. So here we worked that whip-saw which miners declare is an invention of Satan, until lumber was sawed to build our boat. We spent two weeks at this work. Then we loaded in our outfit and pulled down Five Mile River to the Police Post, which nestled amid a grove of spruce trees, a veritable picnic ground, the tents and quaint log cabins making a picturesque scene. Here every boat is examined and numbered and names are registered.

Police stations are to be seen at different places all the way to Forty Mile from the summit of Chilkoot Pass. In this latter place they act as customs officers. These officials are courteous and kind. But this arrangement of taxing men going into that country is, I suppose, a necessary evil. However, it is a hardship to impose this obstruction and expense on men going in to open up this country, teeming with difficulties enough of a natural sort, and it ought to be removed. But our own officials began this sort of thing and the Canadians retaliated, with the result that thousands of men are made the innocent sufferers.

We found Marsh Lake blocked with ice and were compelled to camp at the foot of Five Mile River for a week. There is a large section of country here which may some time be utilized in the production of garden stuff. Potatoes, etc., could be raised. The soil and conditions are excellent. If this becomes, as I believe it will, the great thoroughfare into the Yukon country, then we may expect to see a settlement here. I held services here, and campers came to them from their tents for miles around. We spent our nights in spearing fish with home-made spears. Trout—white fish, as they were called, but unlike our Lake Superior fish—were found abundantly. At the end of a week we pushed on, breaking our way through the ice, no easy task but amusing sometimes when somebody—not yourself—fell into that cold, cold water. After hauling my boat over six miles on the ice, I was the first to reach open water and then sailed down Fifty Mile River. Next day we reached Miles Canyon and White Horse Rapids, and though the stage of water made them very bad, yet we ran them in safety. However, upwards of forty-five wrecks had already occurred, with loss of outfits and some loss of life. It is a very dangerous place and needs some experience to navigate safely.

We entered Lake Labarge, where we had some more ice punching to do. Finally we crossed it and entered the swift and dangerous Thirty Mile River. Miners have, in no account of the trip into the Yukon, been warned as to the dangerous navigation of this river. And yet it is the most disastrous portion of the trip. At least 150 boats were wrecked here this year and the loss of life has been very great. The river is narrow, crooked, with very short turns, and the current is a rapid all the way for nearly thirty miles, and great boulders rise to the surface everywhere with too little water running over them for your boat, and they are hard to avoid.

But it is time I told you something in regard to the gold of that country—and gold there is in all parts of it. The latest discovery is one of which you have heard. The discovery has been made on Tagish Lake. Undoubtedly it is away up the Taku arm of the lake, miles away from the usual trail to the Yukon. If accounts be true then this discovery comes very near to us, and settles the question as to the permanent prosperity of Skaguay as well as the universal adoption of this route into the Yukon.

The reports of the Klondike gold district last year were most encouraging, if not incredible. From what I have learned this year of the facts, I feel obliged to discount those reports to some extent. That the region was and is phenomenally rich is true. But the statement made that the wonderful peculiarity of the district was that the rich pay streak was uniform, that every claim contained gold, that there were no "skips," does not seem to be borne out by the facts. For instance claim No. 5 may be very rich, while claim No. 6 or 10 on the same creek may hardly pay wages. Hence it is not unlike that of any other placer region. But after saying all this, the fact that from $10,000,000 to $15,000,000 have been brought out this year, in spite of inability to work the claim as well as might have been done on account of scarcity of food and light, is sufficient proof that the region is wonderfully rich in gold.

As early as 1883 the Klondike River was prospected for forty miles of its length without any results. The bed of the river consists of a coarse gravel through which the fine gold would go out of sight. The first rich claims in all that country were struck on Miller and Glacier Creeks, tributaries of Sixty and Forty Mile Rivers, which were the richest discoveries until the strike made in 1896 in the Klondike district. This was in 1891. And yet men had prospected these three different times without any results until the happy discovery in 1891. All this goes to show how uncertain the work of prospecting is. In 1881 the Rev. Archibald McDonald, Church of England missionary at Fort McPherson, in returning from a visit to the Tanana Indians, picked up a nugget on Birch Creek. But nothing came of that, except the current story that gold had been found there, until 1891, when prospectors established the fact by discovering gold on several creeks, tributaries of Birch, which led to the establishment of Circle City and opening out a gold district which until the Klondike "strike" was the largest and best paying on the Yukon. It is not worked very much just now, nor prospected to any extent, because the claims are not very rich. But there are a great number of creeks where claims will pay $10 a day, and just as soon as food supplies and labor cheapen, we may expect to see some thousands of men working these and obtaining such wages as cannot be obtained in any other way.

In July, 1896, three men, Henderson, Swanson, and Nanson, prospected up Indian Creek, struck very good pay on Gold Bottom, and staked. Henderson had to return to Forty Mile for food and on the way out met G. C. Cormack and two Indians. Henderson told Cormack about the find (it is a law in the miner's code to report or make known to others that any "strike" has been made). So Cormack and his two Indians traveled across country to Gold Bottom Creek, crossing the "Bonanza" on the way. Cormack was not satisfied with Gold Bottom and returned, determining to try Bonanza, so he sank in several places, but it was finally at a bend midway down the river that he sank and made the famous discovery. In one pan he washed out $12.75; then, having staked the claim, he returned to Forty Mile for "grub," and told of his discovery. The discovery of Bonanza was followed in August by the rich finds on Eldorado, the results of which are evident in the many thousands who have sought that region from all parts of the world.

It is a rich section, undoubtedly; it is also very extensive. The Eldorado, Bonanza, Dominion, Sulphur Quartz, Rosebud, Hunker, are a few of the many rich

creeks. The dumps on Sulphur and Dominion were expected, when I was at Dawson this year, to yield returns as rich and great as most of the Eldorado. I have heard since that they did not do so, but it must be remembered that for want of food men could not work their claims as they had hoped; moreover, lights were scarce; candles sold at one dollar each, and then could not be bought. Water, too, failed this year for sluicing the dumps. Mr. Lippi, who went in two years ago, owns one of the richest claims on the Eldorado. He was offered, I was told, $1,000,000 for his claim and refused it. This year he had been there only a few weeks and was going out with $200,000.

Standing at the Eldorado, where the pay streak is richest, a line due east runs straight through the rich claims of Hunker, Gold Bottom, etc.; from the same point a line due west and away beyond the Yukon runs through the rich creeks of Sixty, Forty Miles, Birch Creek, etc. What a magnificent distance and extent of territory this is over and in which gold is found!

The innumerable creeks of the Forty Mile, as far to the westward as the watersheds of the Tanana, all carry gold, and it remains yet to be demonstrated by work what wealth they contain. They have not been worked as yet. What little has been done on several has proved quite encouraging. While at Forty Mile two men came in from their winter's work on a claim, weighed out their gold, and after paying all expenses had $3,000 each for their own. A man and his wife sold their claim on Franklin Creek for $10,000 and have gone out to make their home at Seattle. They sold too cheap, so men told me who knew the mine. Prospectors tell how on passing this claim they could hear this man and his wife dropping the little gold nuggets, "plunk, plunk," into a tomato can, as though they were pumpkin seeds—and the gold of this creek is of the size and shape of pumpkin seed.

About fifteen miles below the boundary line, on our territory, a live camp has sprung up at the mouth of Mission Creek. The promise of a town here is due to the fact that very rich claims have been discovered on American Creek (which runs into Mission) and its tributaries. I hope this will prove true.

It is evident, then, that gold is found extensively in large sections of that vast Yukon territory.

You have doubtless heard by this time complaints as to the laws and conditions now existing at Dawson and the Yukon. I confess that complaints were general, both loud and strong, even in Dawson when I was there. The system of royalty, recording, timber licenses, etc., were all denounced. If one tenth of the charges made were true, then there is immediate need of a change; but of this I am unable to speak. The gold commissioner, whom I had the pleasure of meeting, did not strike me as a man who would countenance any dishonorable action or dealing. I am going to speak advisedly, because I cannot vouch as to the absolute truthfulness of these cases, but Captain —— of Seattle told me that being very ill—ill all winter—almost in despair of recovery, he gave a friend $10 to go and get his letters. The man returned and said: "The postmaster (member of the mounted police) said, 'I have no time to bother with his mail for $10,'" and his letters he did not get. Many similar stories are freely told, and if they are true they are horrible.

In our own territory the law does not seem to be explicit enough; it errs in being too generous. It is possible for one man to locate any number of claims. A friend told me that he had eighty-five claims staked and these almost entirely in one section. They define every creek and every tributary of that creek as a distinct district and according to the law a man can hold one claim in each district. This ought to be regulated by law. A district should embrace a reasonable section, all the creeks and tributaries within it. For want of this a few men can monopolize all the claims, holding them to sell to the "cheecharka," and thereby shutting out the many who, if they had a chance to stake a claim, would remain in the country and aid its development.

This is the reason that ninety-nine men out of every hundred who went in this year have sold their outfit and returned, not having gone a mile from the Yukon to prospect, with the story that the country is no good, has been boomed, etc. .

It is true that the extraordinary tales of the Klondike riches have not only attracted many thousands, but have created a wild inflated condition of things which a year or so will remedy. For example, men are offered $12 a cord to cut wood, and few or no takers. Men do not appear to like to work in there. It is hard to get many to work for even $12 or $15 per day. I am not surprised, therefore, that so many are returning dissatisfied.

I reached Dawson when it was partly under flood. The first question asked me when I landed was, "Have you any whisky? We have been without four days and we have been expecting some in over the trail." It came in in a few days—2,000 gallons—which sold for $75 per gallon. In a few days more the first boat arrived and its load consisted of 600 gallons of whisky, which sold at $50 per gallon—the first provisions to reach these people reported to be starving. I was told that the man who last year sold ladies' red shirt waists—out of style—for $5 each, which he had bought in job lots at fifteen cents each, brought in a soda water fountain and made $14,000 by it in a few weeks. I saw some bananas, asked the price—$1 a piece. Money! There seems to be no limit to it. But Dawson itself seemed, so far as I could see, free from drink, games of speculation, or lawlessness of any kind. On the water front the crowd swayed to and fro, by night as by day, reminding me in one aspect of the "Midway" at the World's Fair. Sickness has been and is very prevalent at Dawson. Much of it is due to the ill-cooked food which men eat and the Klondike water, which some think is impregnated with arsenic. It is, all in all, a unique place. Its inhabitants are well disposed in every way, and extremely satisfied with the richness of the claims in the district, as well as their great extent.

The minds of all men seem to have become inebriated with the great ideas of sudden fortunes, vast and rich wealth in the claims, and the spirit of speculation has become an epidemic. But in a year or so they will become sober and then the country will be dealt with in a way by which it will be developed and its wonderful resources made apparent. The country is not yet prospected. Ninety-nine out of every hundred who went in this year were not prepared for the above condition of things, and I felt very sorry that this was the case and that they have had to return, not only unrewarded, but after the sacrifices they made and the hardships they endured.

You would be surprised to see the number of steamers which have entered the mighty Yukon this year—that river which but a few years ago never had its solemn silence broken with the whistle of a steamboat. Between Anvik and St. Michael we passed thirty. Beyond Anvik ascending or descending were probably thirty or forty more. You ought to see the magnificent steamers, with their excellent equipment of electric light, etc., similar to and not surpassed by the Mississippi steamboats, built and put on the Yukon by different companies. Those built by the Alaska Commercial Company cost $95,000 each. One of this company's new tow steamers, *Louise*, came up the river pushing two immense barges loaded with 900 tons of freight, and yet, pushing them up that strong current, made seven and a half miles per hour. And I am positively afraid to think what the result will be of all the capital thus invested in these boats. Is it—will it be—justified? I cannot say. But these companies have trained and experienced men who know their business and understand the conditions, hence we naturally reason that they must be satisfied that the resources of this country must be very rich and great or they would not adventure such an outlay. From $10,000,000 to $15,000,000 of an output this year, in the face of extremely difficult conditions, is a wonderful amount; yet it may be doubled next year.

SOME AMERICAN WOMEN IN SCIENCE.*

BY MRS. M. BURTON WILLIAMSON.

II.

IN zoology, Mrs. Susanna Phelps Gage, Ph.B., wife of Prof. Simon Gage, professor of anatomy and physiology at Cornell University, is well known. Her microscopic study of the morphology of the brain and minute anatomy of cilia and muscle has resulted in the publication of a number of monographs. Her first contribution to science was a paper in collaboration with her husband, entitled "A Contribution to the Physiology of Respiration in Vertebrates." It was issued in 1885, five years after she received her degree at Cornell. Mrs. Gage's paper on "Form, Endings, and Relations of Striated Muscular Fibers in the Muscles of Minute Animals (Mouse, Shrew, Bat, and English Sparrow)," published in 1888, has been quoted and referred to by leading anatomists in Europe. Some of Mrs. Gage's later papers have been monographs on the spotted triton or newt, entitled "The Brain of Diemyctylus Viridescens from Larval to Adult Life," "Comparative Morphology of the Brain of the Soft-Shelled Turtle and the English Sparrow" and "The Brain of the Embryo Soft-Shelled Turtle"; the last two reprinted from the *Proceedings of the American Microscopical Society*. As a student at Cornell her preference was for history, physics, and anatomy.

MRS. SUSANNA PHELPS GAGE.

Mrs. Gage was born in Morrisville, N. Y., where she was educated in the public schools, attending the Cazenovia Seminary preparatory to entering Cornell University. Mrs. Gage is secretary of "The George Washington Memorial," a national organization for the erection and endowment of a national university.

* Part I. of this article appeared in THE CHAUTAUQUAN for November, 1898.

Miss Florence Merriam, the young sister of Dr. C. Hart Merriam, ornithologist of the United States Department of Agriculture, had a natural liking for the study of ornithology, and this has been aided and encouraged by her brother. Miss Merriam is a field naturalist and her acute observation and conscientious data have given her a national reputation.

She was born amid ideal surroundings, her father, ex-Congressman Clinton L. Merriam, owning a fine villa, surrounded by forest trees, at Locust Grove, N. Y. Miss Merriam, while a student at Smith College, showed her love and care for the lives of birds by organizing an Audubon Society to oppose the wearing of birds by the students. After leaving Smith College she began a systematic study of birds and bird-life, her home containing thousands of volumes, many of them books on natural history and her favorite branch of it.

FLORENCE MERRIAM.

Miss Rosa Belle Holt, who has written a very interesting sketch of Miss Merriam, says of her opportunity for a study of bird-life at home:

> On the place is a raspberry patch through which Mr. Merriam has cut numerous paths, so that his daughter may be able to go about quietly and observe the birds as they build their nests, chattering to one another like veritable human prattlers.

Besides studying bird-life in her own native woods, Miss Merriam has traveled along the Pacific shore, from Vancouver to Mexico, and lived for months at a time in Utah, Arizona, and California. While residing in California for her health she attended a special course of lectures, for some months, at the Leland Stanford University at Palo Alto.

Miss Merriam's contributions to ornithology are: "Birds through an Opera Glass," "My Summer in a Mormon Village," "A Birding on a Broncho," a study of southern California birds, and "Birds of Village and Field," a bird book for beginners.

Mrs. Olive Thorne Miller's name is familiar to the general reading public as well as to students of bird ways. Her books being the result of observation and not gleaned from other books are contributions to natural history. Miss Merriam says of her:

> Mrs. Miller's careful, conscientious bird-work has not only become a stimulus to earnest observers, but has earned the rare respect of American ornithologists, for by her patient field-work she has contributed a great mass of data upon the life histories of our birds, which collectors and closet naturalists have never had time to accumulate.

Mrs. Miller's study of birds is of comparatively recent date. A friend interested her in birds after she was forty years old, and she was led to a systematic study of ornithology to learn what is known about them. Her books are: "Bird Ways," "In Nesting Time," "Little Brothers of the Air," "A Bird-Lover in the West," "Upon the Tree-Tops," and "Our Home Pets." She

also delivers popular lectures and bird talks.

In order to study the lives and habits of birds indoors as well as in their native haunts, Mrs. Miller has had a "bird-room" in her house for several years. Of this room Miss Merriam says:

> In her bird-room she used to sit at her desk with her back to the open cages of her timid friends and study their ways by means of mirrors arranged on her table. Then when a shy forester, thinking himself unobserved, said or did anything interesting, she would quietly reach for the note-book labeled with his name and put it all down in black and white.

MRS. OLIVE THORNE MILLER.

But studying birds in their own environments is Mrs. Miller's preference, and she has visited many states in order to study their birds. The writer referred to was with her in New York and Utah, and this is what she says of Mrs. Miller's methods:

> Ordinarily when we went to the woods, she would steal in through the bushes in her leaf-colored gown, open her campstool cautiously at the foot of a big tree whose dark trunk would help conceal her, pull down a branch before her, and, with note-book ready, carefully raise her opera glass and focus it upon the nest she wanted to study. And then she would sit, defying the tormenting punkies and mosquitoes, patiently waiting, hour after hour, to see what might befall.

It is often remarked that the commonest objects around us become vested with a charm when interest in them has once been awakened. Students in the various biological laboratories are proving this, and at the same time are doing original work in scientific research. A number of women have in this way studied frogs, toads, fishes, worms, and other forms of animal life, and thus added to scientific knowledge.

Miss Cornelia M. Clapp, Ph.D., fellow of the American Association for the Advancement of Science, professor at Mt. Holyoke College, and one of the most popular lecturers at Wood's Holl Biological Laboratory, has published among other papers one on *Batrachus tau*, one of the toad fishes. Professor Clapp was one of Agassiz's students at the famous Penikese laboratory.

Miss Mary H. Hinckley, of Milton, Mass., daughter of Thomas H. Hinckley, the artist, has made a study of the development of frogs and toads, and the results of her studies of these amphibious vertebrates have been published by the Boston Society of Natural History. These memoirs are: "Notes on Eggs and Tadpoles of Hyla Versicolor," "On Some Differences in the Mouth Structures of Tadpoles of the Anourons Batrachians found in Milton, Mass.," and "Notes on the Peeping Frog, Hyla Pickeringii Le Conte," the common piping tree-toad. These are only a part of Miss Hinckley's contributions to science.

Miss Edith J. Claypole, who is at present taking charge of the zoological department at Wellesley College in the absence of the head professor, who is abroad, has also published monographs on the batrachians. One entitled, "The Blood of Necturus and Crypto-branchus," is a study of the blood of the mud-puppy and one of the salaman-

ders. Miss Claypole's studies are not confined to these animals, being in the line of histology and physiology. Her latest monograph is a "Comparative Histology of the Digestive Tract."

Miss Claypole is a daughter of Prof. Edward W. Claypole, B.A., D.Sc. (London), and Mrs. Katherine Claypole, a writer of popular science articles, and is a native of Bristol, England. Her early education, and that of her twin sister, Agnes M., was at

EDITH J. AND AGNES M. CLAYPOLE.

home, under the charge of their parents, from whom they received their liking for scientific work. Miss Claypole came to America with her parents and was graduated at Buchtel College, Akron, Ohio, with the degree of Ph.B. She received her Master's degree at Cornell University. She has spent two or more summers at Wood's Holl Biological Laboratory.

Miss Agnes M. Claypole, her twin sister, received the same education at Buchtel College, Ph.B. degree, M.S. at Cornell University, and recently she has taken her degree of Doctor of Philosophy at Chicago University. Some of her monographs have been published in the *Proceedings of the American Microscopical Society*. One on "Oögenesis and Embryology of Anurida Maritima" was published in the *Journal of Morphology*.

Mrs. Rose Smith Eigenmann, who, in collaboration with her husband, Dr. C. H. Eigenmann, has published so many memoirs on fishes, is a pioneer among women students in biology in America, although her interest in biology did not begin, as is the case with many students of to-day, in any college laboratory.

At the age of sixteen Mrs. Eigenmann was sent to California for her health, and her outdoor life at San Diego, on the beach, and in the cañons turned her attention to nature studies. In 1879 or '80 she had the good fortune to meet at San Diego, Cal., Dr. William Starr Jordan, who was then studying the fishes of the Pacific coast. Seeing her interest in natural history, Dr. Jordan invited her to visit his "workshop" and learn about fishes, and, seeing her aptitude for this branch of study, he invited her to join his party during the summer of 1880, where she had an excellent opportunity of studying fishes on the coast from Puget Sound to San Diego. The following year she was a student in the Indiana University, where Dr. Jordan was a professor. She was the only young lady taking her electives in zoology, working in Dr. Jordan's laboratory. Her classmates are most of them well known in science to-day, being such men as Charles McKay, Seth Meek, etc. In 1887 she was married to Carl Eigenmann, now professor of zoology at the Indiana University. After her marriage Mrs. Eigenmann, with her husband, had at Cambridge, Mass., the use of the collection of fishes of the Agassiz Museum, and as the guest of Prof. W. G. Farlow of Harvard University she received instruction in cryptogamic botany in his laboratory. She also attended the Harvard Summer School in 1888. The same summer Mrs. Eigenmann had a table in the United States Fish Commission Station, Wood's Holl, Mass., by invitation of Prof. J. A. Ryder and Marshall McDonald, then the United States fish commissioner.

Dr. and Mrs. Eigenmann went from Harvard to San Diego, where they built a small laboratory and devoted their time for over a year to the marine fauna of San Diego.

Mrs. Eigenmann's publications, either alone or with Dr. Eigenmann, number over

forty papers, published in scientific journals and proceedings of societies. As the result of their joint work in systematic ichthyology over one hundred and fifty new species and genera of fishes have been described by them. Their principal work is a volume on "Fresh Water Fishes of South America."

After Dr. Eigenmann's election to the chair of zoology in Indiana University in 1891 they removed to Bloomington, Ind. Since that time Mrs. Eigenmann has done but little scientific work. As the mother of four little children her time is occupied with their training, that being to her of more importance than any amount of scientific work.

Mrs. Eigenmann is a member of the California Academy of Sciences; she was for some years curator of fishes for the academy, and has served as president of the National Science Club for two or more terms.

Miss Mary E. Murtfeldt, of Kirkwood, Mo., often spoken of as the leading woman entomologist of this country, was born in New York City, but when scarcely more than an infant her parents went West and located on a grain and stock farm in Ogle County, Illinois, not far from Rock River, amid whose picturesque scenery and profusion of plant and animal life her youthful tastes were developed.

MRS. ROSE SMITH EIGENMANN.

She acquired the rudiments of education at her father's home under the instruction of her parents and governess. She was passionately fond of reading when a child. When old enough to leave home Miss Murtfeldt attended Rockford Seminary, now Rockford College—at that time the leading girls' school in the Northwest. It was at this seminary that she obtained an introduction to the science of botany.

In 1868 Miss Murtfeldt's father removed to St. Louis, Mo., where he assumed the editorship of Colman's *Rural World*, and was made secretary of the State Board of Agriculture. At the same time Charles V. Riley, the young naturalist and artist of the *Prairie Farmer* of Chicago, with which Mr. Murtfeldt had also been editorially connected, received the appointment of state entomologist of Missouri and went to reside with Miss Murtfeldt's family, removing with them to the suburb of Kirkwood. It is to this distinguished investigator and author, with whom she was associated in literary and scientific work for more than twenty years, that Miss Murtfeldt attributes the success of her achievements in entomology. She had been a writer from childhood, contributing to the *Prairie Farmer* and *Rural New Yorker* and other periodicals articles on rural subjects, as well as short stories, but after beginning the study of entomology

her writings have been chiefly in the line of that science or the allied one of botany.

As a subject for special study Miss Murtfeldt was soon attracted to the Microlepidoptera, and in this field she has had the honor of assisting Lord Walsingham—the present leading English authority on this interesting group—Drs. Riley and Fernald, and the late Mr. V. T. Chambers, of Kentucky, in all of whose works her name as a collector and biologist has frequent and complimentary mention.

MARY E. MURTFELDT.

Miss Murtfeldt has been a frequent contributor to *Insect Life*, *Psyche*, the *Canadian Entomologist*, and scientific periodicals on the life histories of insects and descriptions of new species. Her most numerous contributions have been on the subject of applied or economic entomology for the *St. Louis Republic* and various agricultural and horticultural journals. Her book, "Outlines of Entomology," is an educational manual. She is now, in collaboration with Prof. Clarence M. Weed, of New Hampshire, engaged in the preparation of a series of books for school reading entitled "Stories of Insect Life."

For many years Miss Murtfeldt was local investigator and collector under Dr. Riley while he was United States entomologist, for the Department of Agriculture and Smithsonian Institution, and the records of her work are found in many of the reports of the department. She is a fellow of the American Association for the Advancement of Science, member of the United States Society of Economic Entomologists, Academy of Sciences of St. Louis, the National Science Club, etc., and is entomologist of the Missouri Horticultural Society.

Mrs. J. M. Arms Sheldon is one of the authors of "Insecta," a book of three hundred pages, fully illustrated, that is intended as a "Guide for Science Teaching." This book was written in collaboration with Prof. Alpheus Hyatt, whose assistant in the Museum of the Boston Society of Natural History Mrs. Sheldon has been for several years. At an earlier date she was joint author of another little work on "Worms and Crustacea." It does not bear her name on the title-page, but mention is made in the introduction that Mrs. Sheldon "prepared the text and most of the drawings." A monograph on "The Meaning of Metamorphosis," by Prof. Alpheus Hyatt and J. M. Arms, and an important work by Professor Hyatt and Mrs. Sheldon, which will demonstrate the principles of a natural classification illustrated by the Synoptic Collection of the Boston Society of Natural History, is now in course of preparation. Another work in preparation is a book by Mrs. Sheldon on "Observation Lessons on Animals," for the use of teachers of graded schools. Her monograph on "Clay Concretions of the Connecticut River" has been previously mentioned.

While in charge of the Synoptic Collection of the Boston Society of Natural History Mrs. Sheldon gave lectures in the laboratory to the teachers of the normal schools, and for some years had charge of the zoology in the National School of Methods held at Saratoga. Her monograph on "Natural Science in Elementary Schools" was read at this convention and published in *The Popular Science Monthly*. Numerous papers written by her have been published in various educational journals.

A little book entitled "The Life of a New England Boy" is an historic sketch written by her.

Mrs. Sheldon's early life was spent in Greenfield, Mass., and in 1873 she entered Mrs. Ada Shepard Badger's school in Boston, where she came under the influence of Lucretia Crocker, the eminent educator, to whom is probably due her preference for scientific studies. In 1876–77 she was a student in the Massachusetts Institute of Technology, taking chemistry, geology, zoology, and paleontology under the well-known specialists of this school. Afterward, while a special student under Professor Hyatt in the laboratory of the Boston Society of Natural History, she was also a special teacher in Mrs. Pauline Agassiz Shaw's school, having charge of the zoological department. Mrs. Sheldon is a member of the American Association for the Advancement of Science and the National Science Club.

MRS. MARY TREAT.

Miss Cora H. Clarke, daughter of Rev. James Freeman Clarke, D.D., is the author of some monographs on insects. "Description of Two Interesting Houses Made by Native Caddis-Fly Larvæ," illustrated by original drawings, was published by the Boston Society of Natural History; another one on "Caddis Worms of Stoney Brook" was published in *Psyche* and afterward published separately. "Galls Found Near Boston," a study of the deformations made on plants and trees by insects, was published by the Massachusetts Horticultural Society, after Miss Clarke had given the paper before the society, illustrated by specimens and photographs of varieties of galls. Miss Clarke is now engaged on a book descriptive of New England seaweeds. She is known as an ardent lover of nature. Had her eyesight allowed it she would have prepared herself for a professorship in biology, as her natural inclination is in that direction.

MRS. J. M. ARMS SHELDON.

Miss Clarke has resided in a suburban home near Boston, and, in her early days, she attended the well-known private school of Miss Peabody. After studying chemistry, horticulture, and entomology at agricultural and horti-

cultural schools, she attended the Harvard University Summer School, taking botany, biology, and geology under such instructors as Asa Gray, Dr. Farlow, Dr. Packard, and Prof. W. O. Crosby. Miss Clarke's reason for taking up the study of entomology was not because she was naturally attracted toward insects, but the reverse; she disliked them, but thought if she knew more about them she would not shudder at touching them. In the fact that her special lines of study are galls made by insects and cases of caddis-worms, as well as New England algæ, we have a proof of how successfully she has overcome her natural antipathy. Miss Clarke was one of the active workers in Miss Ticknor's "Study At Home Society," conducting studies in zoology for this pioneer society.

CORA H. CLARKE.

Mrs. Mary Treat, of Vineland, N. J., has long been known as a popular writer on entomology. Some of her papers have been published in book form. Her books are: "Home Studies in Nature," "Injurious Insects of Farm and Garden," "My Garden Pets," etc. Mrs. Treat was the daughter of a Methodist minister, and her education was only such as the public schools could supply. Her mother's influence gave her the impetus toward nature studies, especially her love of insect life. For the past few years Mrs. Treat's articles have been almost exclusively, however, on the flora of New Jersey and published in *Garden and Forest.*

REVOLUTION IN TRAFFIC.

BY ADOLPH SCHULZE.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE GERMAN "UEBER LAND UND MEER."

WE live in an interesting age. The revolutions which steam and electricity have started in the various fields of life have gone on with constantly increasing rapidity. One powerful discovery presses upon another and each one accelerates the tempo of progress which is daily effectuated under our eyes. But our faculties have become dulled. The thousand influences which hourly press upon us have made us indifferent and apathetic. We have seen the railroad, telegraph, and telephone gradually grow to their present perfection and we have come to receive them almost as a matter of course. An important idea of the immense revolutions can be obtained only by him who has imagination enough to picture to himself the astonishment which would come to our forefathers at a sudden return into this newly constructed world.

And we have also become indifferent to the new things which daily and hourly we yet expect. Especially in the last decade have the discoveries so increased that they scarcely call out any special emotion. One

best perceives this by the recent development of human knowledge, the Röntgen rays. When the first news of the Wurzburger professor's discovery began to appear in the newspapers, we smiled with incredulity. A few days afterward it was verified in ways not to be disputed, and for a short time it constituted an interesting subject for conversation; then the public took only an incidental interest in the subject. Only in the laboratories of the scientists a feverish activity began. Everywhere investigations and experiments were conducted, which daily brought to light new examples of the utility of the wonderful rays. But the public took this information as something self-evident and received it with a coolness which can be explained only by the superabundance of the sensations of modern life.

Very similar are the conditions in the field of traffic, although here the change was executed far more conspicuously, and on account of the directness of its connection with our personal relations, it became more evident to us. Some of the older ones among our readers have witnessed the absorption of the stage-coach and wagon by the railroad, and only in poetry have postilions and the old stage-coach left any traces.

We now to all appearances stand at the beginning of a new process of absorption of the same kind, which probably will assume far greater dimensions than the first. It is a question of the dispossession of horses by the motor. The beginning has already been made and poets and thinkers will be unable to resist a feeling of woe if they imagine that the horse, which for a thousand years has been the true helper of mankind, is now to be gradually abolished from the field of action. Of course it is not for the present imagined that the absorption will be so complete a one as in the case of the stage-coach and wagon, for in agriculture and in the army the horse has yet a fast, unmovable position. In the city traffic and on the public highways and in the country, his rôle to all appearances will soon be played out.

The beginning stages of this recent great revolution are already conquered. It has been going on quietly, and the great public has hitherto, at least in Germany, taken only incidental notice of it. In England of course and especially in France for a long time an earnest agitation has been going on which has found a most animated echo in the press of every country. The important widely circulated French newspapers have had for years a special rubric for auto-mobility, which, particularly in the French capital, claims a conspicuous share of public interest.

It is especially noteworthy that the storm proceeded from two different directions and in fields between which there exists a certain connection and whose common relations are yet of a rather loose nature. The starting-point is on one side electricity and on the other the bicycle. The first can be designated as the principal basis of attack, in Germany and America, while France and secondarily England must claim a share in the movement proceeding from the bicycle.

The agitation in the electrical field must now be considered as already completed. With the introduction of electrical street railroads determined upon last summer in the German capital city, the overthrow of the horse for street railroad service is finally sealed. Berlin was a long time in making this determined move, but after the Rubicon has once been crossed, without further ceremony it will assume the leading place in the new field and serve as a model for all other cities, so that street railroads with horse power after a few years will have ceased to exist.

By the transition to electrical power which has taken place in the last few years, 6,316 horses belonging to the great Berlin Street Railroad Company alone became idle. The rest of Berlin offers us comparatively no statistical information, but it will be no exaggeration if the total number of horses in Berlin which have been displaced by electricity be estimated in round numbers at ten thousand. If it is considered that on January 1, 1897, the total number of horses connected with public conveyances reached 23,577, then it must be conceded that the

loss of ten thousand horses means a great deficiency in the business of the capital city.

If we take a glance at the entire German imperial territory, then after an approximate estimate it must be admitted that at the very lowest one hundred thousand horses have been set at liberty by the introduction of electric power, or will be in a few years.

We have taken up first the displacement of the horse by electricity because in a certain measure it can already be considered as a theory that has had its day. But a far greater danger threatens the horse through auto-mobility, in which the free movement of carriages and other vehicles by mechanical power regardless of rails must be understood. Auto-mobility in Germany is yet in its infancy, while in France, especially in Paris, it has already assumed a considerable volume.

The germ of its development is undoubtedly to be sought in the bicycle industry. The high technical achievement of this ideal means of moving along, which made possible such a copious use of human muscular power, must of itself lead the thoughts to subject mechanical power. The German industry ought by right to be proud of having grasped these thoughts first and of having been pioneers in this movement. But it is also a shame to us Germans that here the saying of the prophet that nothing is of value in its own country is verified. Our great motor factories, as Benz & Company in Mannheim, Daimler in Cannstadt, and others, have for some years taken a leading rôle in the field of motor manufacture, but their markets, until a very short time ago, were in foreign countries. In France and England, as well as in America, some years ago, long journeys were made by the auto-mobile carriages, in which the German manufacture played the first rôle, a result which must be considered so much the higher, since the competition in foreign countries is attended with onerous conditions.

But recently an important step forward has been made by the founding of the Central European Motor Carriage Union, and the intensive way in which the improvement of industrial acquisitions is now worked out leads us to conclude that we also can expect a rapid advancement in the field of auto-mobility.

Turning the scale for the decision of the question, utility will naturally be the standard. But this can first be decided after the manufacture of the motor has conquered the stages of experimental measures and there is offered to the public practical, tangible results. That has now been accomplished and therefore it can be safely asserted that auto-mobility will enter modern life as a factor of high economic signification.

The theoretical advantages of the motor rest upon the fact that less power is necessary for the movement of carriages whose construction is in harmony with the principle of the bicycle and also that this power is much less expensive than that of the horse. If we examine these advantages from the practical side, two points of conclusive significance confront us. The decisive point of both is the cheapness, but the easy management and the constant working capacity of the motor carriage must not be overlooked. Opposed to both of these points is the fact that the cost of procuring a motor carriage is at first higher than that of a span of horses, yet this disadvantage is soon equalized by the more moderate expense of working and the greater ability.

An approximate estimate of the cost of procuring and of the working of a motor carriage is the best illustration of this. The prices of motor carriages with complete outfits vary from $475 to $2,500. The less expensive carriages are constructed for the accommodation of two persons, while in the higher priced ones from six to eight or even twelve persons standing can be accommodated. The patent wagon, "Dos-a-Dos," manufactured by Benz & Company for $833, is intended for four persons. It has a motor of five-horse power and weighs about 1,400 pounds. The motive power is like benzine, which, as is the case with all of Benz's carriages, is kindled by an electrical appliance so that danger from explosion is obviated. The wagon on the level and on good

streets is able to travel about eighteen miles an hour and can overcome a rise of from ten to twelve degrees. Filling the motor once with benzine is sufficient for a distance of from sixty to seventy-five miles. In a storage vessel benzine enough for a further distance of sixty miles can be carried along. The steering apparatus works so well that the wagon can be held more securely in hand than one which is hitched to horses. By a simple pressure of a lever the motor carriage can be brought to a standstill. The wagons have lately been provided with backward steerage.

If one should compare the above-named prices for procuring a motor carriage with the prices of an equipage with two horses, there is a difference in favor of horse power, which will be equalized in a very short time by the cost of working and the expense of keeping the horses. The cost of benzine for a motor wagon is about two cents per mile, a sum which in comparison with the cost of keeping a span of horses is not to be considered. It is also to be said further in favor of motor carriages that they can remain in uninterrupted motion an entire day, while a span of horses need rest. A further comparative advantage is that already mentioned, the constant working capacity. Especially in the motor with the electric priming it is necessary only to raise a lever in order to set the wagon in motion. The security of travel is not in the least inferior to that where horse power is used, which is proved by the fact that no accident worthy of the name in auto-mobile commerce has been recorded, although in the numerous long journeys over a distance of 370 miles the highest demands were made on the carriages.

But in all this it must not be forgotten that the development of the motor power is yet in the beginning stages. Judging by the intensity with which industrial advancements are conducted, without doubt great, far-reaching improvements may be daily expected. If all these circumstances are taken into consideration, it must be admitted that the horse has little prospect of withstanding the battle with industry. As everywhere else, so it is here, the best is the enemy of the good. We have many reasons to be thankful to the horse, yet it is not to be denied that on account of his inability to reason, countless misfortunes arise which do not happen with the motor.

Now some one will certainly exclaim that all that has been said previously is only the music of the future; but he who has eyes to see will perceive by a single sign that a strong, continuous power dwells within the new movement which presses incessantly forward. In Paris already thousands of the motor wagons are in use. In the avenue of the Bois de Boulogne there are crowds of the *chauffeurs*, which is the technical name for the auto-mobile carriage. Countless large establishments have done away with their horses and conduct their entire transportation service with the help of auto-mobility. Various large transportation companies already exist which have taken up the motor power.

In Germany we are certainly not so far advanced, but daily there are increasing signs that here also the slumbering spirit of enterprise has awakened and is pressing forward. In single cities already the motor carriage has been introduced into the public conveyance service. A Berlin omnibus company has decided on the experimental introduction of motor power, and for this purpose has contracted for the building of eight carriages. The imperial postmaster-general in Berlin is also said to be taken up with the plan of introducing experimentally two auto-mobile wagons for carrying parcels, and that, too, based upon the profitable experiments made with similar wagons by the London post-office authorities. The Berlin Fire Department has also been busied a long time with the problem of utilizing auto-mobility.

All these enterprises are unmistakable signs of the approach of a new commercial period whose extent is not yet perceived, but whose beginnings will in the future doubtless be marked as a remarkable epoch in the history of commerce.

THE BARRYS.

BY SHAN BULLOCK.

CHAPTER VI.

SUPPER was over. Nan and Sarah were clearing the table; John and Frank sat smoking; on the hearth stood Ted with his back to the fire. Of a sudden Ted flung up his arms and yawned.

"Heigho!" said he. "Faith, it must be time for home. You'll be with me, I accuse, Mr. Barry?"

"Certainly," said Frank rising. He bade the Butlers good-night, put on hat and coat, and turned toward the door. But Ross kept his place by the fire, and stood balancing now on this foot, now on that. "I'm quite ready," said Frank.

"Ay," said Ted. "Well, so am I. But —aw, I'll be after ye. I'll catch ye up afore ye get to the gate. Yis, I will."

Frank hesitated. He had no wish to go stumbling in the darkness down that muddy lane.

"But I can wait for you," said he.

"Aw, ye needn't, ye needn't," stammered Ted. "Sure—aw, I'll not be a second."

With a laugh, John Butler rose.

"Come away," he said, taking Frank by the arm. "I'll show ye as far as the shore. Can't ye see," he went on, as they crossed the yard, "that it's a private kiss Ted wants at the door? To be sure. An' you or me, Frank, 's not wanted at these little affairs. Ay, no."

The two passed out of the yard and went down the lane. The trees stood black and dead; beyond the hedges the fields slept in their loneliness; not a sound was there, far or near, not a sound but the level drawl of John Butler's voice, wandering here and there in the darkness round this subject and round that.

They came to the lake; launched Ted's cot and sat down upon its gunwale. John went on talking; Frank, with a sound as of kissing in his ears, leaned forward and fell to tapping his heels impatiently on the stones. Presently he shot upright.

"I don't hear Mr. Ross coming," said he; "I wish he'd come."

"Ay?" said John. "Well, I'll bring him." He whistled shrilly on his fingers. "That'll hurry him."

Ten minutes passed; twenty went; John talked of this and that, chiefly of big London; Frank began to fume.

"Confound the fellow!" cried he at last. "Confound him!"

"Aisy, Frank," said John; "aisy, man. If he doesn't come—Whisht, here he is."

From away up the lane came a jabber of voices; then, "Well, good-night, Nan"—"Aw, good-night, Ted," then the thud of feet among the trees.

"At last," said Frank rising.

"Aw, there's an end to all things," said John. "Even to blarneyin'."

Breathless, and somewhat flurried, Ted reached the shore; at once began his apologies. He was sorry to have kept Mr. Barry waiting; he hadn't meant to be so long.

"Aw, hold your whisht, Ted," John Butler broke in, and swung the cot round to the pier. "Sure it's no time at all you've been considerin' what you've been at. Now, no more talk, Ted; but in ye go an' hurry home to your bed afore your lips have time to cool. Now, then, Frank me son. Off ye go," said John, and with a push of his foot sent the cot skimming away. "Safe home, both o' ye. Come again soon. An' good-night."

"Good-night, John," answered Frank.

"Same to you," shouted Ted Ross; then, bending across his oars, sent a long cry out into the night, a cry that rang along the shore, echoed from the hills, died away among the woods; suddenly was born again on the face of Inishrath and came back to Ted in a long, sweet halloo.

"There it comes," shouted John from the

quay. "One goose answerin' another. Haw, haw!"

"Haw, haw," laughed Ted; then spat on his hands, dipped his oars, with long, sweeping strokes sent the cot flying for Garvagh.

It was a moonless night but not dark; fresh but not cold. Not a breath of wind was blowing. Silence brooded over the waters, and the calm deeps were sown with stars. Behind in Inishrath a light shone in the Butlers'; round the lake, here and there, other lights glimmered out; far and near the woods lay stretched in their blackness along the shores. Away toward the mountain a drum was rolling out defiance to the natives of the hills; as from another world, so remote was the sound, came the baying of a dog. "Clink, clink," went the oars against the thole-pins; "drip, drip-p-p," said the blades as they swung for a stroke; "swish," cried the water as the cot went flying. Right and left stretched the water—a mystic mirror sprinkled with silver dust; behind, the stars lay jumbled in the foaming wake. Never before had Frank seen night in nobler garb, never before sat brooding in his nothingness beneath an ampler dome, in the depths of a grander hall of silence.

Suddenly Ted Ross threw back his head, and set his oars swinging to the tune of a hillside ballad. Of love and beauty sang Ted, of teeth like pearls and eyes shining like the morning, of a voice, och so soft, of lips, och so sweet, of his own darlint, own little colleen. Aw, but she was fair; aw, but she was dear to him; aw, but she had raven hair, an' aw, that she was near to him!

"Sing out; sing out," shouted Ted. "Man alive, give it voice:

> "Up on the hillside lives me little colleen,
> All day long does she think of me;
> Dear to me heart is me smilin' little Naneen,
> Sweeter than the breath o' morn is she.

"Aw, you're not singin'," called Ted. "But maybe ye don't know it. Wait now. Ay; you'll know this." And out over the waters went the rollicking burden of "Biddy Aroo." Swiftly now did the oars go swinging, crisply they bit the water. Ted's voice rose and fell, dallied with the grace notes, coyed with the shakes, softly went gliding for the mad burst of the chorus. "Aw, man, sing out; sing out," shouted Ted. "Louder, louder. That's it. An' now once more. Aisy, sir; aisy does it. 'Aw, luv, farewell,'" drawled Ted, wagging his head from side to side. "'Aw, luv, farewell;'" then, as if to rend the firmament:

> "Wid aroo, aroo, ar-ah; aroo, aroo, ar-ah;
> Aroo, aroo, an' ready—oh-h-h;
> There's whish-ky in the jar.

"Good," cried Ted, "that's how to take the lonesomeness out o' the night; that's the way to make the blood bounce in ye. Aw, blood an' turf, but it's the grand night! Aw, but I must let it out." Madly he skirled up at the stars; then hung on his oars, just as the cot swung round for the landing place. "Whisht. Listen to it travelin' round the shores; listen to the ring of it. Aisy, Mr. Barry, till she strikes land. There ye are, safe over, an' God be thanked."

Ted pulled the cot high upon the shore, swung the oars across his shoulders, and with Frank set off through the fields. Presently they struck the Garvagh road and turned toward Ryfield. Frank was in moody humor. Still was that sound as of kissing in his ears; still that long-drawn cry from the hillside. He wished to be quiet; wanted to think about Marian, and Rab, and Nan; and here at his elbow was this boisterous yokel, this full-blooded clodhopper! Of course the fellow had reason for his mirth; still. . . .

Ted clanked the oars together; looked round about him and up at the stars.

"Holy fly, but it's the bully night," said he; "the finest I iver seen. As fresh as new hay it is, an' as hearty as a mountain side. Be danged, but it makes one feel like a bull of—of—What do they call the place? Some place in the Scriptures?"

"Bashan," suggested Frank.

"Ay, that's it; that how the verse goes. Like a bull of Bashan, says King David in that grand way of his. Faith, that's not bad. I wonder, now, if John Butler iver said anything like that? I wonder did he?"

"Very likely," said Frank. "His tongue seems to pick up most things."

"Ay, it does. Sure in all the world there's not such another word-slinger as John Butler. Not one. Dang me, but I often think his tongue's on a pivot an' can't stop wagglin' once it gets started. Wouldn't that be your opinion, Mr. Barry?"

"Well, hardly that," answered Frank with a laugh. "But certainly it can run pretty freely."

"Aw, run; faith, it's heaven's own mercy he's the only one of his kind within sound of a drum. One does for a change, two maybe'd keep other company at times; but more than that'd be worse than King Solomon's wives an' them all beggarwomen. But sure ye know it for yourself. Now, tell me this, Mr. Barry," said Ted, shifting his oars from one shoulder to the other. "What's your own private opinion of John as a spouter?"

Frank shrugged his shoulders, considered a moment; gave it as his opinion that, taking all things into consideration, John talked remarkably well.

"Ay?" said Ted. "I know. An' what things would ye be considerin'?"

"Oh, such things, perhaps, as lack of education, of a wider knowledge."

"Ay," said Ted again. "I know. The things that a man like yourself might have."

Hastily Frank demurred. Not at all, he explained; only the things that your good talker must have.

"I see," said Ted. "Well now, an' as a man, what d'ye think of him?"

H'm. Ha. As a man? Well, Frank liked John Butler. He thought him kindly, big-hearted. His laugh was enough to make one love him. Seldom had he seen a more jovial face; and his hospitality was —well, it was Irish.

"I know," said Ted. "Tell me, did ye see the fields? Ye did. Well?"

"They seemed neglected. Don't mistake me, Mr. Ross; I quite see that John Butler has his faults."

"Faults," interrupted Ted; "is it faults ye say? Why, man, he's one great big fault. Aw, I can't keep me patience wi' him," cried Ted, clanking the oars on his shoulder. "Ivery time I see him I feel me hands itchin' to take him be the scruff o' the neck, and put a spade in his fist, an' drag him out to the fields. Ye seen them. Aren't they a disgrace to God's earth? Isn't the whole place only a wilderness? Aw, I can't think of it." Ted paused for a little while. "I tell ye a strivin' man could make Inishrath like the Garden of Eden. I wish to glory I was fixed on it. In a year I'd turn ivery thistle on it into a cabbage. But no matter; I'm not John Butler; an' thank God for that mercy! Look at him; a whole island to himself, a good house to live in. But sure, ye know. Why, it's king o' the lough he should be! But no. That's not John Butler. No, sir. So long as there's a bit for his belly an' a roof over his head he's content. Let the land go to blazes, says John; let the people talk, says John; let the divil do his endeavors, says John, but I'm goin' to take things aisy. Ay, that's John. There's not as good-for-nothin' a man on the face o' God's earth. If the house was afire he'd light his pipe wi' the blazin' thatch. Ach, it makes me sick," cried Ted. "I dunno how I have patience wi' him."

"You didn't have much with him to-night," Frank ventured.

"Didn't I?" Ted stopped. "How d'ye know I didn't? How d'ye know what I didn't say? Patience! Great father, an' me burstin' to get at him! If it hadn't been for Nan I'd—I'd ha' flittered him. London! D'ye think, says he, if iver I'm put out of Inishrath. . . Ach," cried Ted, walking on again, "it's sickenin'. Who the blazes wants to turn him out? The tyrants o' landlords, says he, the infernal tyrants o' landlords. Why, I tell ye, if the landlord had his rights it's on the parish John'd be years ago. Ay, an' it's there he'll be yet afore he dies; sure as death it is."

"You think, then, he has grounds for his fears?" asked Frank.

"Look ye here, Mr. Barry." Ted stopped again. "Ivery man in this world is afeered o' what he deserves. An' hasn't John Butler the right to be afeered when the bailiffs are always at his heels; when he niver has a pound note to wrap 'round a

sixpence; when he's always as bad the day as he was yesterday, an' 'ill be no better the morrow than he is the day? Hasn't he the right to be afeered, I ask ye?"

"He has," answered Frank. "And you think he won't improve?"

"Think," said Ted, and laughing walked on. "I wish I was as sure o' heaven's gates as I am o' that. No, sir. John Butler's a hopeless specimen."

"And yet one likes him," said Frank.

"Likes him? Sure it's love him one does—ay, love him."

"And you think some day he'll have to go?"

"Once the ould father dies it's sure as death, if John doesn't mend his ways. The father was a dacent man; so long as he can draw breath—well, no one likes to see gray hairs in the ditch. But when he dies—" Ted moaned.

"Well, what then? There is always London, you know."

Ted looked at Frank over the oars.

"London!" said he. "London! Hang it, when he mentions that I could dance on his neck. Him in London! Arrah, what for? D'ye imagine money walks about the London streets, an' loaves o' bread, just for the likes o' John Butler to pick up?"

"Perhaps both are as plentiful there as on the Irish hills."

"I believe ye," said Ted. "But listen to this: for a man like John Butler, Ireland's the only place in the world that's foolish enough to keep him. Ye hear that?"

"I do."

"An' ye hear this," added Ted. "John Butler may go to glory in his own way, but there's one of his name he'll not take with him, as long as I have a bone in me. No, sir."

There came a short pause; then said Frank:

"You mean Nan?"

"I do."

Another pause.

"You're fond of Nan?"

"Ah!"

Another pause, then:

"I think you have a charming sweetheart, Ted."

"I'm thankful to ye."

Frank caught his thumbs in his waistcoat pockets; looked up at the stars, kicked idly at the stones, turned again to Ted.

"You're a lucky man," he said. "I almost envy you."

"I know," grunted Ted.

Frank looked here and there across the hedges. Ted, with his eyes fixed on the road, trudged firmly along. Suddenly he looked up.

"She's the best girl in Ireland," said he; "an' I know it. She's the very best. I like her well. I'd do anything for her. She's as pure in the heart as gold itself."

"I believe you," said Frank. And thereafter silence held these two, all the way to Ryfield.

Frank bade Ted good-night, hurriedly went up the lane, crossed the yard, passed through the kitchen, and softly opened the parlor door; there, half asleep in his chair before the fire, sat old Hugh. A moment Frank paused; then shrugged his shoulders and strode into the room.

"Hello, uncle," said he. "I didn't expect to find you up so late."

"I know ye didn't," answered Hugh. "I waited for ye."

"That's good of you, Uncle Hugh." There was a letter lying on the table. Frank lifted it, smiled, and sat down.

"You'll want your supper?" asked Hugh. "It's there for ye." He nodded at a dish that lay beneath a tin cover inside the fender.

"Thank you, uncle." Frank opened his letter. "But I don't feel hungry."

"No? Mebbe you've had it? Where've ye been?" asked Hugh abruptly, and for the first time turned his head. Frank glanced from his letter, raised his brows; went on reading.

"Oh, wandering about," he answered airily; "wandering about."

"Ay. You've been wandering a good while it seems. Come, sir. Answer me. Where've ye been, I say?"

Frank looked over the top of his letter.

"Must I really answer?"

"I ask ye."

"Well, then, if you must know—I've been to Inishrath."

Hugh turned in his chair.

"I know. Thank God, ye didn't lie to me. An' what took ye to Inishrath, may I ask?" Frank seemed absorbed in his letter, his legs crossed, a smile on his lips. Hugh slapped the arms of his chair and bent his brows. "D'ye hear me, Frank Barry? What took ye to Inishrath, I say?"

Frank uncrossed his legs, frowned slightly, bent forward.

"Well," he drawled, with a heave of his shoulders, "really, uncle, I don't know what took me. I was lonely here; I wanted a change." He waved his hand. "Candidly, I went to see John Butler."

"I see," said Hugh grimly. "I know. To see John? An' this'll be the first time ye seen him?"

"No—not exactly."

"I see," said Hugh again. "I know. Ye've been to Inishrath before, then?"

"Yes; I have." Frank sat back and raised his letter.

"An' it's only John Butler ye went to see?" Frank did not answer. Quickly Hugh twisted in his chair and gripped its arms. "Didn't I warn ye th' other day," said he with sudden fierceness, "against John Butler? Didn't I as much as say you'd better *not* see him? Didn't I, sir?"

"Yes; I believe you did say something to that effect, uncle."

"Didn't I say he was a good-for-nothing, an' a wind-bag?"

Frank looked at the fire.

"I think, uncle, that you are a little hard on John Butler. I can't quite agree with you. He has faults; but I find him a very interesting and not unworthy man."

"Ay, ye do." Hugh shot out an arm. "An' why? Because he's the father of a very interestin' daughter. That's why."

Frank lowered his letter.

"You're not quite accurate in your guesses, uncle."

"I'm accurate enough. People don't go twice to Inishrath inside three days just to see John Butler. No. A pretty thing," cried Hugh, "a pretty thing for me to be sittin' here all the evenin' knowin' you were away payin' your respects to the daughter of a wind-bag!"

Frank smiled.

"You're wrong again, uncle. The young lady's sweetheart happened to be there all the evening."

"Then the more shame for you," cried Hugh. "Ah, ye may talk. Ah, d'ye think I don't know ye? D'ye think I can't read ye like a book? Didn't I know from the first sight I had o' your face that a woman could wheedle the heart out o' ye? Answer me this, Frank Barry. Didn't Nan Butler's face draw ye to Inishrath this night?"

Frank shook his head.

"No. It was quite an accident that I went at all."

"You're shufflin'," cried Hugh. "Answer me! Have ye any regard for her?"

Frank looked at Marian's letter; smiled; glanced at Hugh's stern face.

"I think well of Nan Butler," he made answer. "As for the rest—" he shrugged his shoulders.

"Think well of her!" Hugh snorted. "Think well of a countryside hussy without a decent dud to her back! Tell me," he asked, leaning forward and shooting out a forefinger, "who's that letter from?"

"It's from—London."

"It's from your sweetheart, sir," shouted Hugh. "From the young woman that believes in ye. That's who it's from. An' yet before a week ye go playin' her false! Ah, whisht; I know it. Look ye here, Frank." Hugh began wagging a finger. "Your father was like ye, an' he broke more hearts in his time than he was worth. He was a fool; an' you'll be a fool if ye don't take care. Take my advice. One woman trusts in ye; I hope she does; let one be enough. One's enough for most men; mebbe you'd be as well without that one; but no matter. She believes in ye, an' if she's worth havin' she's worth keepin'. That's all, Frank," said Hugh rising;

"that's all. I had to say it. I had to say it."

Frank also rose.

"You needn't have said it, uncle. Believe me, you need not."

Hugh turned on his way to the door.

"Ah, but I know better," said he. "I know better. "Man, it's in your face." He came back and laid a hand on Frank's shoulder. "D'ye mind what I said th' other day? 'Be a man,' said I, 'be a man.' Well, I say that again. Good-night, Frank, good-night."

"Good-night, uncle." The door closed. Frank sat down and stirred the fire. "Dear old man," he said. "A little trying, a little rough—but he means well." He lay back in his chair and picked Marian's letter from the table. "And now," murmured he. "Now!"

The letter was very long; as Frank read it sometimes his face was smiling, sometimes grave; now he muttered a word and looked at the fire; once his eyes filled with tears. Presently he put away the letter, took a portrait from his pocket, and for a long while sat gazing at it. "Dear Marian," he murmured. "Oh, my dearest Maid Marian. . . . There is no one like you," he said at last, and rose for bed. "No one. No one."

CHAPTER VII.

FOR a while Frank Barry kept from Inishrath. He knew old Hugh was watching him; nothing, he said, must rob his thoughts of dear Maid Marian; prudence, if nought else, bade him keep eyes off Nan Butler for a day or two. So, note-book bulging his coat pocket and pencil neatly sharpened, Frank made for the hills and fell to spying out the land.

Over a big tract of loughside country (wherein is much bad land and a thriving race of peasants famous for fishing and poaching and speaking a soft and oily dialect) Frank flashed his eagle eye. Within the broad bounds of Orange Gorteen he found much wherewith to make his pencil dance. Through the land of Emo he passed, making note of its pleasant aspect, its beauties of lake and river, its castle called Rhamus frowning from a rush-clad hill. Along Thrasna River he went, and felt his fountain of poetry rise a-bubbling. Bilboa and its whins and rushes struck his soul as with a hand of gloom. Away inland toward the stately mountain, across the wind-swept bogs, over the melancholy hills he set his face; strode along sandy roads, splashed down muddy lanes, strove through squelching fields, followed his fancy here, there, and everywhere.

And everywhere he was made welcome. Every one seemed to know him, to have heard of him; every one remembered his father and had stories without end to tell of that roaring blade. People stopped him on the road. Aw, how the divil was he? Aw, sirs, but they were glad to have grip of Frank Barry's hand. Men hailed him from the field. Aw, sure, was it passin' them like that Mr. Barry would be after? Now, now! From the houses women came running, wiping their hands on their aprons. An' wasn't it in Mr. Frank was comin', just to rest his legs? The children passed him with downcast eyes, then turned to gaze open-mouthed at his coat-tails. Sometimes one, not knowing Frank sufficiently to dare venture speech, would lift his caubeen; again, a woman in like straits would glance admiringly at his handsome face and duck a curtsey as to his lordship himself. Girls (for these Frank's eye was tenderly keen) hurried past with averted gaze, only to twist chin to shoulder and follow him with dancing eyes. Men praised him; women flattered him: with all he was a darlint boy. And Frank took it all very good-humoredly; gave word for word and joke for joke; laughed with the men, chatted with the women, gave the girls fine flashes of his daring eyes; altogether had a pleasant time of it and a memorable. Yes, Frank Barry walked something of a hero through that little while; had pride in the buzz of excitement which followed his steps, thought he was a great man entirely, and as clever a fellow with note-book and pencil as ever splashed mud in an Irish boreen.

Well, perhaps he was.

So, for a few days, it was with Frank Barry. Then, one night, down came a gentle wind from the west, and hurriedly old winter gathered his tattered skirts and fled for the frozen north. Softly broke the morning, and in her glory over the hills young spring came tripping. Down into the valleys she flashed her magic. At whirl of her wings the trees and hedges awoke. Beneath the scamper of her feet old earth lay thrilling; up to the sun and the blue floor of heaven went the jubilation of her song; the grass stirred, the birds piped out, in the heart of man was gladness and in his blood new life.

The change was blessed. The peasants came to their doors and drank the sweet freshness. Ould winter was gone at last, himself and his pack of troubles, said they; he was gone, the ould villain, and God be thanked. Children, on their way to school, shouted till the hills rang. Men paced the fields and fell to planning, eager to make ready for the spring's quickening, and the summer's fashioning, and the autumn's fruition. Suddenly, almost while you winked, you might say, the whole face of things had changed. Instead of silence was bustle and life, instead of mists a wondrous clearness; the fields were empty no longer; you heard carts clanking, cattle lowing, horses neighing, noise and life everywhere. It was great; it was blessed.

In the yard of Ryfield House old Hugh stood looking toward the mountain and rubbing his hands together. This was the weather, sir; this was what he had been hungering for. No longer now might the land lie fallow. The spring had come, sir; the blessed spring. Long, bright days, long, bright sunshine, himself working hard and the weather helping harder: these were what he wanted. Man, how he liked that morning; the smell of it, the feel of it. He thanked God Almighty he was alive; he prayed his Maker he might see many more days such as that.

But Frank, where was Frank? In bed, Hugh warranted. Sally, Sally; let Sally hurry Mr. Frank up and out. Ah, here he was at last.

"Come here, sir," called Hugh. "Come here and get the blears from your eyes in this breeze from the mountain. There's a sight for ye, me London-bred sonny; there's something better than smoke and fog to greet ye o' mornin's. Look at that stretch of country away across there to the mountain; fields an' fields, an' hills an' hills, all shinin' an' laughin'. D'ye see how fresh everything is? D'ye see? D'ye see? Man, Frank, isn't it all great?"

"It's beautiful," said Frank. "I knew well when I woke this morning that spring was here."

"Ay," said Hugh; then slapped Frank on the back. "By the holy poker!" cried he; "but I think I could fight ye—ay, an' whack ye this grand mornin'. Man, I feel I could jump over the hedge there! An' me gone sixty. Me an ould man, ye might say. Och, och, Frank," said Hugh with a quick change of tone, "it's a mercy to be young. Make the most o' your youth, me son; make the most o' your youth. Away in now an' have your breakfast; an' hurry out again, me son, hurry out to this blessed mornin'."

"I will, uncle," said Frank turning. "And you'll fight me when I come, mind."

"Ah, away wi' ye," shouted Hugh. "Away an' fight Sally."

Leisurely Frank went in; with his precious note-book propped before him against the teapot, leisurely made his breakfast; leisurely put on his hat, at last, lit his pipe, and strolled out upon the lawn.

Yes, it was a beautiful morning. How did it impress him? His spirits were not boisterously bucolic (good phrase that), like those of Hugh. No. He did not feel ecstatic. No. It was only your materialist, your agriculturist, who ran riot in the spring. He felt just poetically impressed. Yes. He was in the humor to compose a sonnet, an ode, or something. He must add some notes on spring to the long list of his observations. All things were grist to the novelist's mill. Nature's secrets! Pooh! Nature had no secrets for him. That sky was a lovely blue. How well Dame Nature always mixed her colors; no bungling, no

smearing. He must note that. Soon the thorn would be budding. Why, actually the buds were already in sight! How curious. That old oak over there, so gnarled and battered, how strange to think that all was turmoil beneath his tough bark. Ah, that must be noted. Really, the country looked wonderfully well. That landscape wanted only a flash of water to relieve its monotony. By the way, he wondered how the lake looked that morning. Perhaps if he strolled to the shore he might find something worthy the seeing and noting; something less monotonous than those eternal fields. Let him stroll.

Behold, then, Frank Barry once more sitting solitary on the stones of Garvagh pier. His note-book is open, pencil in his fingers. Up and down the lake he looks, here and there. In the sky he seeks inspiration—for a note—in the broad waters, in the gleam of distant shore. He peers among the willows, harkens to the music of stone and wavelet; presently turns his eye—not for the first time, but now lingeringly, critically—on Inishrath.

There are the barren fields running up from the shore; there are the trees, and their shadow like a black ring in the water; there is the Butlers' cottage. Quite picturesque it looks, nestled there in the bosom of the hills. Ha! There goes big John, hands in pockets, shoulders slouched, hat on the back of his head; goes shambling along, without care or purpose, just lounging about in the sunshine and waiting for some one to call him to the ferry. There he goes across the garden, Nan's garden, out to the lane and away up to the hill crest; now he sits down, lights his pipe, lets his eyes wander over his demesne. Happy John. Ha! There goes Mrs. Sarah across the garden, carrying a can; now she is at the quay, now dips her can and shuffles back. He dislikes Mrs. Sarah, does Frank; she is sly, is sleek, is cringing. Hello! Frank springs to his feet. Who is this, coming across the garden, something big on her back, a pair of oars across her shoulder, a basket on her arm? It is Nan. So. Nan has her jacket and cap on. Nan comes down the lane; reaches the pier, places her burden in a cot, jumps in, unships oars, makes a stroke, and is off. The cot turns, the oars flash; away Nan goes, hugging the island—away from Garvagh. Frank waves an arm. The cot sails on. Frank waves both arms. The oars stop; the cot turns and steadily comes for Garvagh. Frank sits down; begins humming a tune. How beautiful is the morning, thinks he; how gloriously beautiful it has grown within the last five minutes.

The cot swung to the pier. Frank swept a bow and smiled.

"Good-morning, Nan. I hope you're not very angry with me?"

Of course Nan was not angry; why should she be?

"I've brought you out of your way, Nan, and I've brought you here; and now, 'pon my word, I don't know why I did it, except just to speak to you."

Nan laughed; looked at Frank, then at the point of an oar.

"Sure that's no great sin," said she.

Frank put a foot on the end block of the cot.

"I'm forgiven, then? Good. And now tell me where you are off to?"

"I came to ferry you, Mr. Frank. But before that 'twas off for turf I was."

Frank put his other foot on the end block of the cot.

"And is it far to the turf?"

"It's a good piece. It'll take me an hour. An' I'll not be back, maybe, till sunset."

Frank puckered his lips; looked away. "Ho, ho," said he. For a minute he stood considering; then: "Should I be very much in the way, Nan, if I came with you?"

Nan flushed; quickly began raising difficulties. Ah, Mr. Frank'd be welcome, but sure what would he be doin' in a turf bog? Sure, 'twas a dreary, God-forsaken place. Sure, 'twas a dirty old tub the cot was; an' 'twas full of turf she would be coming back. Sure, what would Mr. Frank be doing for want of his dinner? "Come an' welcome, sir, come an' welcome," was Nan's last word; "but sure—"

Boldly Frank stepped into the cot.

"I'm coming, Nan," said he. "Aw, but sure I just am. Now then, we go." Nan sat still, fixedly staring at the water. "I can't take an oar," Frank continued, "but than you'll have the pleasure of rowing me. So there are compensations on both sides, you see."

"Aw, sure," said Nan, still with her eyes on the water.

"Look." Frank sat down. "I'll sit here and be a good boy. I promise you I will; and I promise to do nothing worse than talk to you and look at you."

Nan said nothing. Frank sat looking at her. What was her difficulty? Was it the proprieties? Was it Ted Ross?

"A penny for your thoughts, Nan," said he.

She glanced at him.

"They're worth little."

"Then they're not about me?"

"Well, they just are. I'm thinkin'—" Nan paused. "I'm thinkin' whether 'twas very wise o' me to turn back for ye."

"Ah." Frank rose. "Well, then, I'll keep you no longer. Good-by, Nan." He turned to go.

But Nan dipped her oars and pulled away from the pier.

"Naw," said she. "Naw; ye can't go now. But—but what you'll do in that wilderness of a bog, I can't tell."

Frank sat down again.

"Leave that till afterward," said he. "Meanwhile, do look at me, Nan, and don't be cross with me."

"Sure, but I'm not cross," came back. "Aw, not at all. But sure you'll be starved before sunset."

Frank laughed.

"Nan, Nan," said he, "you're the most artless girl I ever knew. Do you know what any woman in a thousand, except yourself, would do if she were sitting in your place?"

"I dunno."

"Well, she'd row straight for Inishrath and take up a third passenger."

"An' who?"

"Her mother"; and at the word Nan laughed.

"Aw, Lord sees!" said she. "Lord sees! Well, mebbe so; but not if she was an Irishwoman, I'm thinkin'. Aw, no. Thank God, things like that don't bother me. Aw, dear no; dear no." All at once she stopped rowing and leaned forward on her oars. "Tell ye what, Mr. Frank, wouldn't it be a good notion for me to land an' put something more in the basket?"

"To eat?"

"Surely."

"What's there already, Nan?"

"Aw, only a trifle. No, no, Mr. Frank," said Nan, as Frank pulled the basket toward him, "don't open it. There's only bread and milk, an' a grain o' tay, an' potaties to roast when I light the fire—an' that's all."

"Would you share, Nan?"

"Aw, faith would I, to the last morsel. But sure that kind o'—o' feedin' would choke ye."

"Then we'll choke together, my dear," said Frank. "On you go."

Nan bent to the oars. The cot ran quickly toward Inishrath. The sun had strengthened; the air struck warm; under high heaven was a great hum and thrill of life. Frank lay back, rested head on hands, and looked here and there across the lake. It was glorious. Never had he seen a more beautiful day, never looked out upon a lovelier scene. Seldom before in his life had he been happier, in better spirits. He felt the spring working in him; was in the mood to sing and shout. Curious that the day should so change. In Ryfield, standing on the lawn, he had felt clean and strong—and all the rest; now he felt joyful. Why was it? Was it because he had escaped from the tyranny of the fields, the thraldom of the clay, and had come out into a larger air, a wider range of vision? Or was it simply that spring had gripped him? Or was it that Nan, the gentle, soft-spoken Nan, was near him? He looked at her, as she sat swinging to and fro, at her sweet face with its bloom of health and youth, her wavy black hair, her broad brow, her lips slightly parted, full and rosy red.

"Oh, Nan, Nan," murmured he.

"Were ye speakin', Mr. Frank?"

"No, no, Nan. What a day this is," said Frank looking heavenward.

"Aw, yis. For long an' long I've been lookin' for this to come. Thank God, the winter's past."

"You like the spring, Nan?"

"I just love it. There's no time o' the year like it. When I woke this mornin' 'twas like a child I felt, that fresh an' bright. Aw, yis."

"And you feel so still?"

"Aw, I do. Sure it's wonderful to think o' what's comin'; everything alive at last, an' growin', an' growin'."

"And the flowers blooming in your little garden over there, Nan?"

"Aw, yis; sure it's blessed."

The cot neared Inishrath. Around its shore the water lay peacefully in the black shadow of the trees. Up from the lake ran the bare ribs of the fields. Hardly a stone's throw away, so it seemed, stood the cottage of the Butlers', white, low, picturesque; in front was Nan's garden; down from it ran the lane between the trees and hedges; all was still and very beautiful.

Frank clasped his knees with his hands, bent forward, and let his eyes feast on Nan's sweet self. To and fro her body swayed with a steady rhythmic swing. Now her face was nearer his, and her raven hair and broad brow; now it was drawn back, and the strong roundness of her throat and full oval of her face showed clear. Out shot her hands, and she was bending toward him as if to whisper something; back she leaned again, and, as if beckoning him, as if drawing him toward her, slowly her hands withdrew.

"Ah, Nan, Nan," murmured Frank. "Nan, Nan."

Quickly she looked at him.

"I'm listenin'."

"I didn't speak, Nan."

"Faith, an' it's yourself then," laughed she, "must be gettin' into the ould wives' way o' talkin' to yourself."

"I was thinking, Nan."

"An' a bad habit too."

Frank laughed.

"My thoughts don't interest you, then?"

"Surely. An' me a woman!"

"Well, I was wondering, Nan, whether it *was* wise of you to turn back for me."

"Ay? Well, it's too late now to repent!"

"Yes, it's too late. Look." Frank waved a hand toward Inishrath. "There's the lord of the isle taking his ease and the sun."

For a stroke Nan rested on her oars.

"Aw, poor father," she said; "poor father. God knows he's a curious mortal. All day long he'd like to squat up there an' smoke. Sure it's heaven's pity he's not a walkin' gentleman."

"Would he be happier then?"

"Aw, mebbe. Mebbe not. I often think he's just as well as people that go wearin' their hearts out, kickin' about the world."

"Just as well," said Frank.

The cot went on; rounded the Inishrath shore; came to a stone ditch that ran a little way into the lake; and there, hugging his up-gathered knees, sat John Butler. His face shone like a beacon-light; his hat was tilted over his eyes; steadily he watched the cot come near; slowly took the pipe from his mouth and began chuckling.

"Aw, very well," called he; "very well. Just wait, the pair o' ye; just wait. Ted Ross 'll be comin' the night, an' then—aw, be the powers, Frank, it's flittered ye'll be."

"Good man, John," shouted Frank.

"Ay, indeed. An' good man, Frank, say I. Aw, it's you's the playboy, Frank, sittin' collogin' wi' another man's sweetheart."

"Aw, whisht, father, wi' ye," said Nan. "It's ashamed ye should be."

"Ay. Ashamed, indeed; an' so I am, troth. Where are ye goin', Frank? What the divil are ye doin' in that ould cot?"

"Off for turf, John."

"For turf? Off to the bog? Aw, quit your foolishness! Why, man, it's worse nor the desert of Sahara. Come in here wi' ye."

"Not this time, John; some other day."

"Come in an' have a crack, I tell ye."

"The siren 's in the wrong place, John," called Frank, and looked at Nan.

"Aw, whisht wi' ye."

Frank waved his hand and called good-by. On went the cot and left John shouting on the shore of his kingdom.

"You heard what your father said, Nan?" asked Frank in a while.

"Aw, I did. Sure he'd give his eye to have a talk wi' ye."

"I don't mean that. I mean what he said about you and me, Nan."

"Aw, *that*." A flush spread on Nan's cheek. "Aw, 'deed I did. But sure father's good at the blatherin'. He'd talk like that, when the humor's on him, to the king an' queen. Aw, 'deed ay; 'deed ay."

CHAPTER VIII.

With Nan toiling at the oars and Frank lying back at his ease, laughing, singing, admiring nature, admiring Nan; with beauty at the prow, so to speak, and pleasure at the helm, the cot went on; left Inishrath and John the lord thereof; ran between the long lines of the woods and below the ramparts of the hills; shot past this little island and that—homes, most of them, of the rabbit and the gull; sent the clank of oars into many a loughside cottage, calling forth flocks of tattered children, and barefoot women, and shaggy-bearded men; turned at last up a narrow river, and came, in a while, to one still narrower, a glorified ditch you might say, whose mouth gaped ruggedly in the heather-covered bank.

Nan pulled in her oars, rose, and fixing a pole in the river bottom, deftly shot the cot's head into the ditch.

"Here we are," said she, and pushing at the pole came from thwart to thwart toward Frank. "Here we are at last; and glad ye must be, I'm thinkin'."

"Why glad, Nan?" asked Frank, making glad his eyes with the sight of her face and figure.

"Aw, just because." Nan pulled at the pole and turned to fix it anew. "Aw, just because," said she over her shoulder, "I was thinkin' it possible in time to get tired even of laziness."

Frank laughed and rose.

"I stand reproved," said he, with a mock bow. Again Nan turned and from thwart to thwart came toward him. "Allow me, madam," said he, stepping forward. With one hand he caught the pole, Nan's wrist with the other. "Now apologize, miss."

Nan drew back.

"For what, Mr. Barry?"

"For—for—" Her face was close to his; her breath warm on his cheek. "For calling me lazy, Nan." Quickly he clutched at her other wrist; missed it; the next moment was sprawling across the gunwale, and Nan was laughing down at him from the bank of the ditch. As well and as quickly as he could Frank recovered himself, steadied himself with the pole, and stood upright.

"Thank you, Miss Butler," said he. His voice found a sudden note of piteousness. "Nan—Nan, why did you do that? You know I was almost in."

Steadily Nan looked down at him; a hand on her lips, her eyes dancing.

"Aw, it's one way of apologizin', Mr. Barry. An' now what are ye goin' to do?"

Frank plucked the pole from the mud and mounted a thwart.

"Oh, I can manage," said he. "Don't mind me, please. I can manage." He fixed the pole; began walking the thwarts. Bump went the cot against this bank. He pulled at the pole. Back swung the cot against that bank. "Confound it," muttered he, plucking at the pole; up it came suddenly, the cot lurched, down sprawled Frank Barry. "Confound it," cried he again, uprising in his wrath. From the bank came a sound of laughter. "What the deuce," cried Frank, "are you laughing at?"

Nan uncovered her face; looked at him between her hands.

"Aw, heavenly hour, I'll die!" she said.

"Oh, you may well laugh," began Frank; all at once threw down the pole and himself began laughing. "Serve me right for a conceited ass. Come back, Nan; come, and I promise to be good."

"Not I."

"Then——"

"Give us grip of an oar." And with Frank holding the handle and Nan pulling at the blade, slowly the cot went on.

They came soon to a clump of willows that overhung the ditch bank; and there Nan halted.

"It's not kingdom come," said she; "but it's the best one can do. Throw us up that chain."

"Say, 'If you please, Frank.'"

Nan bobbed a curtsey.

"Throw us up that chain, may it please ye, Mr. Frank Barry." Up went the chain and was twisted round a stump. "I'm obliged to ye, Mr. Barry; an' now the creel an' basket, sir." Up went the creel and basket. "Thank ye kindly." Nan held out a hand. "An' now, if ye please, yourself."

Frank mounted the gunwale, scrambled up the bank, and still holding Nan's hand, looked into her eyes.

"Nan," said he, "ask my pardon."

"For what, Mr. Barry?"

"For your sauce, Miss Butler."

"Sauce? D'ye mean the kind they put on the goose, Mr. Barry?"

Frank laughed.

"Oh, you're incorrigible."

"An' what's that?"

"I could——" He meant saying he could kiss her. "What am I to do with you?"

"If you'd kindly carry that creel about twenty yards an' quit holdin' me hand, it's the best thing I know ye could do."

"The best, Nan; the very best?"

"Aw, quit wi' ye." And pulling away her hand Nan snatched up the dinner-basket and set off across the heather.

Frank stood watching her till she reached and disappeared behind a willow clump that stood some distance out in the bog; then slung the creel upon his back and set out in her footsteps.

His path ran through thick heather and over rough turbary. Here and there the bog-holes gleamed darkly; here and there lay gnarled stumps, piles of mud, broken heaps of turf. Farther off were willow clumps, small and sparse; on his right the river glittered; behind, far beyond the ditch, stood a low rampart of hills; on his left, miles and miles away, ran a long mountain; far in front were hills again; and between all these, spreading out and away, lying flat as a lake, receiving the sweet gifts of spring and sun with a grim dreariness, a sullen indifference, lay the great barrenness of turf bog. All was strangely quiet there. A smell of heather, of peat smoke, came gratefully. Close by a girl was turning peat upon a bank; half a mile away a woman trudged beneath a creel of scraws toward the river; but from these or another came no sound. Not a bird flew over the heather; like a place of graves the great bog lay in its loneliness.

Frank came to the willow clump; there found Nan on her knees patiently striving to fan a pile of sticks and peat fiber into a flame. He threw down the creel.

"Well," said he, "this is a wilderness of a place. Your father libeled the Sahara, Nan."

"Ay?" Nan stooped, began coaxing the flame with her breath.

"This neighborhood would make a good site for a convict prison," Frank went on, looking about him.

"Ay?" Nan went on blowing.

"It's mighty curious, isn't it, to think that once a great forest grew here between the hills, that the river over there is all that is left of the lake that once spread——"

"Quick," cried Nan. "Now I've got it. Hurry with the dry turf there. Hurry, hurry, when the flame's good. That's it," said she, placing the turf all round the tiny fire. "That's it. There's nothin' in the world can cheer your heart like a good blaze. An' now," she stood upright, "now for work."

Nan pulled off her jacket, hung it on a willow branch, and went out into the heather. Not far off was a turf bank and bog-hole; and lying here and there, a few on the bare bank, the rest among the heather, were small heaps of turf, some broken and scattered, some arranged in rows to catch the wind, some but the remains of clumps that had long since been taken away. Among these lay Nan's work. At home, she explained, their winter's stock of peat had nearly run out. And now, per-

force, they had to fall back upon the best they could get. Soon, of course, would be turf-cutting time; in a couple of months, please God, the turf house would be full again; meanwhile the pot must be kept boiling, and so——

"So," said Frank, "you must needs come here to slave."

"Aw, no; sure some one must keep things going."

"Your father, Nan, is yonder on Inishrath, sleeping, no doubt, in the sunshine."

"An' much good may it do him."

"Couldn't you have stayed and he come?"

"Aw, 'deed ay," laughed Nan. "'Deed ay, an' see him comin' home the morrow mornin' wi' six wet turf in the creel an' all the dry ones left behind. Aw, no," said she, stooping to her task. "Aw, no."

Deftly she picked the driest of the turf from a heap and flung them on one side. Quickly from heap to heap she passed, flinging here wet and there dry as she went; right and left her arms flashed out; as lissom as a reed before the wind her body rose and fell.

Frank stood watching her; after a while buttoned his jacket, turned up his cuffs, and bent his back.

"You don't mind my helping you?" said he, picking up a turf.

"Aw, no; of course I don't; but sure——"

"Sure what, Nan?"

"You'll hurt your hands."

Frank rested palms on knees and looked round.

"You're laughing at me again, Nan."

Nan stopped working.

"Laughin'," said she. "Well, God knows I'm not. Arrah, at what?"

"I thought," said Frank, "I thought perhaps you were mocking——"

"I never mock."

"I know it, Nan; I know it. 'Twas the wrong word. I thought—I fancied you meant to imply I was only a poor mortal and not fit to do a stroke of honest work."

Nan stood upright.

"Lord sees!" said she. "Think o' ye gettin' all that out of a simple remark! Sure, I meant just what I said: that the turf and the heather'll hurt your hands. Why, you're worse nor father."

"I am," said Frank with a smile. "I am. But tell me, Nan; do you think your hands were ever made for such work?"

"I—I dunno."

"Well, I'm sure they were not; nor were you made for it."

"Ay?" said Nan.

"To think of *you*"; Frank spread his hands in a sudden flutter of indignation; "to think of you having to come here to slave like a cotton planter; to bend your back for hours at a time over things like that"; Frank kicked viciously at a turf; "to have your hands torn and scratched—why, it's simply disgraceful."

Nan had been watching Frank with something of wonder lying in her eyes; now she looked away from him across the bog.

"But, sure, other people do the same," said she.

"You're different from other people, Nan."

"An' how?"

"In every way," said Frank; then suddenly bethought him whether he were acting wisely. What he had said, what he was about to say, was true every whit; still, of what avail to pour disillusion, even if it were truth, into the clear well of Nan's simplicity. Why make her discontented with her fate? Her lot was fixed. She was only a colleen; she might have been a lady; and she was destined to jog through life at the heels of a yokel. If Frank could have his way; ah, if he only could. . . .

"You are vastly different from other people, Nan," said he. "Am I the first who has ever told you that?"

"The very first."

"Has Ted never told you that?"

Nan flushed, looked away.

"Ted niver says such things to me."

"Never admires you, Nan?"

"Aw, he does; but sure——"

"Never said you were the handsomest girl in the parish, and the sweetest, and the best? Did Ted never say that, Nan?"

Nan looked up with twinkling eyes.

"Aw, quit wi' ye," said she; "is it turn me head you'd do? Tell me now yourself. Is that the way you'd talk, supposin' you were Ted?"

Frank looked away. Much good his effort after wisdom had done! Supposing he were Ted? Oh, those eyes, that brow!

"If I were Ted, Nan," said he, his voice quivering, "that's not half what I'd say."

"Not half? Not half?" Nan stood looking at the heather, her hands twisting a corner of her apron. "Not half?" said she, suddenly looking up. "What time might it be, Mr. Frank? Aw, mercy me! Sure it's time the dinner was roastin'"; and off she ran toward the fire.

Frank sat down beside the heap of dry turf. Was he acting wisely? he asked himself again. A minute ago he had been perilously near making love to Nan; even now he felt perilously near making love to her again. She was a dear girl. Suppose he had obeyed the impulse of that moment, had opened his arms and taken her within them; had told her all that she did not know, would never know except from him? What then? Would Nan have listened? No; he was sure she would not. But suppose he persisted in telling her, persisted with open arms? What then? He knew. But a minute ago he had seen something in her face, a look of discovery, a flash of insight, which told him better than words could tell how soon and how readily he might rifle the simple treasures of her heart.

Should he tell her? What madness! How could he be so weak? Was not Nan bound? Had not he his Marian, his dear Maid Marian? He must fight this passing fancy, trample it under foot. He must be wise—if only for Nan's sake.

They should be good friends, be like brother and sister: that and no more. He must be strong. He lay back on the heather and vowed by high heaven that he would be strong; and high heaven laughed in face of the sun.

In a while Nan came back from the fire: at once, without a word, went on with her work. She seemed pensive, looked grave and pale. Frank took his place beside her. He was resolved to be strong. He kept his face from Nan and did not speak. Side by side they moved on through the heather. Frank's back grew weary; his head swam; the turf bruised his fingers, the heather scratched and stung them. He stumbled on. He must be a man. But, heavens, to think of enduring such ills through a livelong day! Were they not nearly finished? Was it not time for dinner? He stood upright.

"I'm beaten, Nan," said he. "My bones are crying out."

Nan glanced at him.

"I was expectin' that," said she.

"But you—how can you endure it, Nan?"

"Aw, use is second nature."

Nan worked on. Frank stood watching her. Why did she look pensive? Why did she not talk? Was it because of what he had said?

Nan straightened her back and sighed.

"There," said she. "Thank God, that's all done. An' now, mebbe, the dinner's ready." She moved toward the fire. Frank took her by the arm.

"What's the matter, Nan?"

"Nothin', Mr. Frank."

"But there is. You've hardly spoken a word these twenty minutes."

"I was workin'."

"But working and talking often go together."

"One can't be always gabblin'."

"Look at me, Nan," said Frank. "You're not thinking of what I said a while ago?"

She looked up at him not very boldly; then stepped toward the fire.

"Well, if ye ask me," said she, "I was just thinking if the dinner was spoiled."

(To be continued.)

EVOLUTION IN THE KITCHEN.

BY FRANCES ALBERT DOUGHTY.

CIVILIZED life will become still more complex in its requirements before the pendulum will begin to swing in an opposite direction, unless some unforeseen cataclysm should suddenly disintegrate and sweep away the mass of achievement.

The call for auxiliary hands in the homes of affluent members of society will be no less urgent in the twentieth century than it has been in the nineteenth. Probably fewer will be employed, but the decrease in numbers will have to be offset by an increase of efficiency, and it is putting it lightly to say that already considerable uneasiness is being felt about sources of supply. Since the abolition of slavery in the South there has been no trained class for domestic service in this country. The old-fashioned negro cooks knew instinctively how to make everything savory, which fact would argue that a discriminating taste for seasoning must exist in the barbarous native African even if he does eat his enemies. Some of the daughters and sons of those ante-bellum cooks and butlers are scattered throughout the States, but this generation in America will see the last of servants who retain the traditions of former days. The young negroes now who have passed creditably through the public schools aspire to be teachers, clerks, mechanics, dressmakers, if not lawyers and doctors.

Our farmers' daughters would rather stand all day for starvation wages in city stores or risk losing their health and fingers in factories than work in private families, declaring that additional comforts do not compensate for the surrender of their evening independence. Many of the immigrants who cross the seas with the expectation of entering domestic service have never seen the interior of a first-class house. The preparation of meats is a strange story to them. They have been too poor to have meat on their own tables except as a rare treat, and the only vegetable they know how to make palatable is the potato, which is the staple article of diet in the Emerald Isle. "Bridget," taken as a type, proves a rolling stone because few housekeepers find her suited to their needs; she is unable to emancipate her habits of thought and life from the crude and lowly conditions in which she was born and reared. The peat from her native bogs seems to cling to her feet to the end, her tongue is ever hot and ready, and her ways are not over cleanly. In fact she is quite as untidy as the average negro servant, and with all these drawbacks expects as high wages as if she were a model.

The Annas and Emmas of the Scandinavian peninsula have usually had some training before they came over, and the first generation make excellent servants, but their number is limited, and unfortunately they are prone to marry and depart at an early period of their career in our kitchens. They seem to be uncommonly magnetic to the other sex, and a mistress complaining of being so often left in the lurch was answered by her Swedish maid with an artless confession which may account for the peculiarity: "All Swedes girls likes mans!" That mistress finally resorted to engaging a cook who had a crooked eye and a nurse who had a crooked mouth, feeling reasonably sure that they would not be belles and leave her as soon as she had taught them her ways, but even this experiment did not prove entirely successful. Cooks of every nationality have "followers" courting their favor with serious matrimonial intentions, for men have always recognized the preeminence of the cook in human society. The second generation of Swedish as of German immigrants usually rise in the scale of wage-earners, and do not enter domestic service.

It becomes evident to the student of

sociology that the solution of the domestic problem must be looked for from above, and not from below. It will be reached by thinking and not by unthinking citizens; intelligent women will arrive at it by experiment and arbitration, never by warfare, open or covert.

At this time the cook is the object of the most widely spread, remedial effort, a conviction prevailing that the office is a pivotal one in the household and that all other factors of comfort and economy can be adjusted thereto. The good health, good sense, good humor, and good looks of the family are more clearly seen by our generation to depend upon proper nutrition than by any preceding one. The saints and sages of this day have learned enough of human nature to start their reforms in the kitchen.

The housekeeping and cooking schools in Belgium, Switzerland, and Paris have been notably successful, girls of all classes being trained in them free of charge to do everything that pertains to the home, and continual applications are made by housewives to the board of managers for laundresses, maids, and cooks. The system works admirably across the water and many of our American cities are following the European example by introducing a course of cooking into the public schools. The pupils enjoy it thoroughly, finding it a welcome relief from books and blackboards. They learn the relative nourishment of food stuffs, the value of the pulse family, lentils, peas, and beans as meat substitutes, the availability of sour as well as of sweet milk, the utilization of scraps, and many other object lessons in the simple chemistry of common life. Each one prepares something in turn under the supervision of the teacher, and soon discovers that cooking, so far from being essentially dirty and awkward, is a neat and delicate function. A Paris *chef-de-cuisine*, who stands at the head of the profession, cooks an elaborate course dinner without confusion or waste in a kitchen no larger than a butler's pantry. These public schoolgirls will make better housewives and mothers in all the years to come for the methods acquired, but how many will take those methods into other people's kitchens? A very small percentage. Up to date in this country cooking classes in the public schools and in industrial schools outside have been attended chiefly by young women who either want to learn the art for the benefit of their own homes, present and future, or for the purpose of becoming teachers of cooking. Those who are learning it with a view to going into domestic service are usually foreign born, and not yet fully imbued with the American spirit.

It is not impossible that the kitchen, as expressed in its chief functionary, the cook, may undergo considerable social evolution in the early part of the twentieth century. Now that so large a number of advanced and far-seeing men and women are awakening to the scope of domestic science and studying combinations of food materials with reference to hygiene, they will not long continue to relegate such important interests to a body of ignorant office-holders. If the class hitherto monopolizing this branch of labor persists in refusing to undergo an adequate training for it, the household field will be adapted to the exigencies of a better endowed and more conscientious class of workers. There are thousands of impoverished women seeking employment who once had homes of their own in which they superintended well-ordered kitchens; these have also the advantage of a cultivated and inherited taste for good food, and would be glad to cook for the public if a way of doing this could be devised that would not deteriorate their social status and prospects. There are college girls, too, who have acquired cooking as a fine art, and needing money for the continuance of other studies would be ready to take charge of a kitchen as the scientific laboratory that it really is. A request to put brandy in the pudding-sauce is in itself less startling to delicate sensibilities than the request to sponge a patient with brandy, only the point of view has made imaginary boundary lines and distinctions.

The crucial test of servitude seems to be

the residence under the same roof with the persons served. Might there not be visiting cooks who would come at stated hours or for occasions to prepare the dinner, the other meals being easily entrusted to less experienced and less expensive hands? Such engagements could be made by trained ladies or trained peasants; their efficiency would be the determining feature.

A hundred dollars a month is not an extraordinary salary for a skilled cook to receive in New York City, and an instance is on record of a multi-millionaire paying a French *chef* ten thousand a year. Wealthy families will always be able to secure a satisfactory resident cook who has been trained in the best European or American schools, but for families of moderate means it looks as if the cooperative kitchen would be the ultimate way out of the difficulty. At present there is a waste of fuel, of cooks, of kitchens in household economics, and in order to make a cook worth her keep and her wages she is often obliged to act as laundress. Thoroughly skilled labor in all departments of living is becoming more and more specialized.

A cooperative kitchen would have to be convenient to a number of houses; perhaps later an architect will build houses around a block and a kitchen for the use of all in a central courtyard. Such a kitchen could well be conducted by a representative of the refined and educated class who would understand "moral cooking" and would have also a cultivated taste for edibles and seasoning. She or he, as might be, would want to do away with the hot ranges of the past and their clumsy adjuncts and to substitute gas stoves, spirit lamps, and electricity. An improvement in the *personnel* of cooks and their environment, a demonstration of the worthiness of the profession would present it in a different light to all wage-earners, and the American sovereign would no longer affix a stamp of odium to cooking as a business, and further adaptations and changes would take place which cannot be foreseen from this distance. The trend of the times toward having less food prepared in home kitchens is plainly visible in the quantity of bread, meats, and salads, pies, cakes, and desserts purchased not only from bakers, caterers, and confectioners, but from the industrial exchanges in which private housekeepers of the most honorable grade have made an entering wedge as cooks for the public market. The immense pickle, preserve, and canned fruit industry could not have been conceived of by the housewives of the past; they would have declared unanimously that it was impossible for cooking to be done away from the precincts of the home.

In any event a certain amount of service will always have to be performed within the walls of homes, and it will not answer for mistresses to keep their minds in a medieval attitude. Is it not part of our present trouble that many are jealously holding the feudal idea of the servant as a vassal because it is flattering to their own importance? They find no difficulty in harmonizing their other social relations with the spirit of this age, because modern progress has accorded to those a scope and independence that are highly agreeable to their dignity. They should remember that the craving for novelty, movement, and excitement which stirs the ranks of women of leisure to a perpetual ferment could not fail to reach wage-earners as well, for they breathe the same air and live on the same territory, under the same institutions that have come under the dominion of the car-whistle, the daily paper, the telegraph, and the X-rays. Mistresses need training; a greater degree of consideration on their part would lead to more respect for the rights of employees, more willingness to allow them hours of freedom, and more care in the matter of lodging.

It is likely that domestic service will take to itself more and more the rules of business houses and factories. There will be hours of work under orders and hours of absolute liberty, wages being paid in proportion to time and work. In many homes one servant alternating with others of the staff is enough to remain on duty in the evening. In the southern cities since the war the majority of the negro servants have arranged this matter by accepting

lower wages and leaving at dusk. Some mistresses are seeing advantages in this plan, inconvenient as it must be in many ways. They say they are glad to get rid of the crowd in the kitchens, the noise, the dirt, the smoke from visitors' pipes, the waste of fuel, the danger from fires and lamps.

An increase of system and order on the part of housewives is another desideratum; it would prevent many a mistake. If a cook is even tolerably equipped with knowledge one visit a day to the kitchen is enough on the part of the mistress, and this should be made after breakfast. It is a good plan to write out a menu for the three ensuing meals and to leave it in a prominent place for reference; a recipe from the cook-book can be indicated by putting the number of the page against the desired dish on the list. This one daily visit will have a better effect upon the cook than six, by increasing her sense of responsibility and of the dignity of her position; few women can brook interference at any and every moment.

More sincerity also is needed. Not enough importance has been attached to the grading of cooks according to their merits. In this country we go through a form of requiring recommendations, but many ladies are actually afraid to tell the truth about a girl they have employed lest they should find themselves boycotted at the employment offices by her friends and acquaintances. The servants too have a right to their record, verbal or written, of the character of mistresses. Some ladies feel a compunction about blighting the prospects of a less fortunate sister, and this hesitation is to a certain extent commendable, but they also owe something to a sister in their own sphere of effort, and in the end honesty would be the best policy for all. Many faults are amenable to correction, or they may affect employers differently. For instance, if Sally is a good cook with a bad temper there are ladies who would be willing to handle her with gloves for the sake of her skill. Mary, on the other hand, may have an amiable disposition but know little about cooking a dinner, and there are housekeepers who would be willing to take the trouble of teaching Mary for the sake of her general obligingness. Such faults alleged as dishonesty and impertinence would cause, as they ought, a withdrawal from the field. If all employers when applied to for references would specify the degree of efficiency possessed by their former domestic, with a direct bearing upon the amount of wages they consider her worth according to the educated standard of labor, after a while she would come to be labeled practically for the general public service. An eight-dollar cook in our large cities would mean one who knows enough to subject food to the action of heat, and nothing more. So on up, from twelve and fourteen dollar wages to the fancy prices paid by the millionaire. This method would give a general and continual bias on the side of the training school, which is our only hope. We must stop paying an eight-dollar girl sixteen-dollar wages.

A HOUSE OF GLASS.

BY JULES HENRIVAUX.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE FRENCH "REVUE DES DEUX MONDES."

IT is certain that the word architecture no longer has and that it will have less and less the precise and limited signification which was formerly given to it. Among the ancients, where existence was infinitely simpler than with us, architecture was confined to a few types of construction. The complication of existence, the tendency to specialize everything, which characterizes our modern civilization, has given birth to a crowd of different constructions, the need of which was not formerly felt and which must have different forms and aspects to respond to the varied needs they must

satisfy. To the palaces and chateaus of yesterday, to our churches, town-halls, and court-houses, have come to be added a vast number of edifices which may be grouped in multiple categories. There are those which correspond to the great services of the state: department buildings, post-offices, hospitals, schools, etc. There are theaters, which multiply continually, sale and exposition halls, markets, stock exchanges, institutes, libraries, museums, etc. There are stores which are taking a more and more important place, railway depots, hotels, and restaurants, whose luxury, organization, and management, calculated to seduce the constantly increasing crowd of travelers, are assuredly one of the characteristic traits of our modern manner of living. Finally, there is the infinite variety of tenement houses and especially of private dwellings, which have never at any other epoch reflected in an equal degree individual caprice, particular fancy, one might almost say anarchy of taste.

It will be admitted that so many buildings, so different in usage and type, have singularly enlarged the signification of the word architecture and that we are necessarily removed from the meaning the ancients gave it. In truth, for each of these constructions different materials must be used, for those suited to a market or railway depot would not be to a church or a princely dwelling. It is the needs, the purpose of the edifice, which dictates the choice of material employed. Now, as all materials impose forms appropriate to their qualities and their nature, a diversity in architectural conceptions necessarily results. It is not rash to foresee that we will have in the twentieth century a series of styles which will correspond to stone, to brick, to metal and its different uses, to glass, and to combinations of these materials; and it will be principally by the *motifs* of their decoration that they will bear the seal of their epoch.

It is at least four years ago that architects obtained a hint of the new services that glass is called upon to render them. It can take the place of wood and iron, of materials of construction and of decoration. It can serve to make conduits, pipes, vats, tiles, chimneys, and even houses.

The project of constructing a house entirely of glass might have appeared chimerical three or four years ago. At present the problem offers easy solution, so rapid has been the progress of this industry which each day enlarges and increases in importance. The results obtained recently by the invention of ceramo-crystal or glass stone are going to open up still larger horizons. This new material is nothing less than devitrified glass, that is to say glass brought into a special molecular condition and of which the aspect is the same as that of cut stone, granite, or marble. It is run into blocks or plates of greater or less dimensions, which are utilized in building. These plates may receive the most diverse decorations, taking at will the calm tones of stone or the sumptuous brilliancy of the richest marbles. They are made either plain or ornamented with designs *en creux* or in relief, obtained by the aid of powerful presses, which act upon the material when in a suitable state of malleability. They are made rough upon one face in order to facilitate their adhesion to the cement.

The degree of resistance which these glass stones offer has been determined by official experiments made at the laboratory of Bridges and Roads at Paris. It has been found that to crushing, freezing, wearing, shock, and rending they offer greater resistance than the stones ordinarily employed in building.

The architectural employment of glass comes as a consequence of the important rôle which has been given to iron. After many attempts ideas take definite form, objections fall, difficulties are found removed. Very often an industry must wait for its development until another has been perfected. If metal has had up to the present time, and for thirty years, so many detractors, it is because independently of the faults that have been attributed to it from the esthetic point of view all the facilities that it offers in relation to the

decoration of edifices have not been foreseen. Construction is not everything for the architect. He must in addition make a work of art and find in the manner of employing the material of which he makes use, the element of beauty. "The beauty of the edifice results from the perfect harmony between the means employed and the end sought and from the accord between all its parts which results from this. It exists even in a building if the reason for each thing is seen at once. Decoration is the *ensemble* of *motifs* useless to the existence of construction, and which tend only to charm the sight. It might disappear without impairing the normal use of the edifice, for it is not an integral part of it." As a complement of this judicious distinction, it may be said that there exists a close relation between the form, material, purpose, and decorative system.

The glass stone of M. Garchey has scarcely come into existence when there is revealed for it a mode of employment as convenient as inexpensive, thanks to a method of working iron invented by the American Golding.

By his process a plate of metal is transformed by means of a special machine which works as a punch into a lattice work where there is neither solder nor rivets, a fact which assures it very great solidity. The machine which thus cuts the metal into larger or smaller meshes draws it out at the same time. In this way trellises are formed, which are rigid, and, in spite of their lightness, are capable of considerable resistance. Suppose that this lattice is clothed with a layer of cement, partitions, floors, and walls may be obtained at will. Imagine now that over this cement you apply panels of veneering in opaline or indeed in glass stone, which may very easily be brought together and jointed on the lace work of metal, and you have a decoration as varied and practical as it is possible to conceive.

By this example, which one of the most recent processes of present industry furnishes us, we perceive the fertility of imagination of our inventors in the sort of ideas we are considering. Again, the advent of glass as an architectural element is taking from day to day extraordinary proportions. Every moment a new discovery is being produced to make the employment of it common. To add to the causes which militate in its favor, the demands of prophylactic hygiene or even of simple cleanliness, which is becoming so rigorous in our day, recommend it outside of its decorative advantages. What an immense advantage it would be to substitute for our movable hangings and painted paper, hard, non-porous surfaces which would easily bear washing. For the construction of the walls one might employ glass, either in compact masses or in pieces blown and shaped in a way to permit their being easily brought together in a skeleton of iron united to them by bands of flat iron. The bricks or slabs of glass are placed vertically, backed and joined by the aid of a special mastic. In this way a double wall is formed, in the interior of which may be made to circulate in winter warm air, and in summer compressed air which expands and cools the building. In these walls are placed the electric wires, water pipes, etc. The advantages resulting from such a system of construction are understood without being insisted upon. Air and light everywhere, cleansing made easy, the impurities of the walls made visible, such are the conditions that the employment of glass permits to be realized and which clearly establish the rôle which this marvelous material can and must play in our modern world.

In order to offer to the people of the entire world, whom the universal exposition of 1900 will draw to Paris, a convincing demonstration of the multiple advantages which glass offers from the different standpoints which we have just enumerated, that is to say architectural, hygienic, and artistic, we have formed the dream of a house entirely constructed and ornamented with this material. For want of the dwelling house such as we would have desired, with all the practical accessories of present comfort and showing at the same time glass under the infinite aspects that it may have,

the next universal exposition will at least show an interesting monumental application of glass. I am speaking of the Luminous Palace conceived by M. J. A. Ponsin and which the architect, M. Auguste Latapy, is going to raise near the Eiffel Tower, upon a piece of ground set aside by the administration for this curious undertaking.

To construct a palace consecrated to the glory of electric lighting was the initial thought of M. Ponsin, the distinguished glass-worker. That this palace should be constructed of glass in order better to display the prodigious effects of the light whose power it was desired to celebrate needs no explanation. MM. Ponsin and Latapy combined their efforts and the luminous palace is now in course of construction. The conception of it is interesting. In the center of a garden bounded by green lawns, where extend walks bordered with flowers which favor the effects of perspective, the palace will arise, lifting into space its tortuous silhouette, strangely cut, like a jewel, decorated with phosphorescent precious stones in a casket of somber trees. The principal façade will have the aspect of an immense portico whose roofing, surmounted with campaniles and a winged statue personifying light, will be sustained by high colonnades. On the ground floor, reached by a double pair of stairs decorated with balustrades, will be a grand exposition hall. In the interior of the hall will be five large bays, where visitors will be able to contemplate the five parts of the world, a panorama due to the talent of M. Castellani and of which M. Armand Silvestre has given the following description:

A quintuple polychrome vision awaits the spectator to whom appears in different directions Europe, which the rosy fires of dawn tint; Asia, where the gold dust of the dogstar burns; Africa, where the sun dies in a red wave of blood; America, lost in the vapor of pale hyacinths and violets of the twilight; Oceanica, finally, where the moon plunges as it were into the sparkling and at the same time somber dust of the lapis lazuli. Thus the Old World and the New will revive in their plastic evocation what I might call the five ages of light.

We forbear to describe in detail this sort of palace of the Thousand and One Nights, of which the first conception seems to have sprung from the brain of a decorator and poet to whom the difficulties of execution seemed trifles unworthy of checking an audacious constructor. His fancy has been given free play and he has not deigned to foresee obstacles that his co-laborers were not capable of surmounting. Entirely of glass was his program and he has gone to the conclusion of the problem with a beautiful confidence in the solutions which would be suggested in proportion to the needs. Of glass the walls of the palace supported by a skeleton of iron, of glass the cupola and the columns and the stairways and the grottos where gleam the stalactites, of glass even the statues which ornament the different parts of the monument, and if the genius of light which will surmount the cupola cannot be realized in precisely this material, of which the incalculable resources have nevertheless a limit, no matter, it can be made to serve, by the brilliancy of the enamel, by the appropriate decorations, by ingenious accessories, as the apotheosis of glass.

It is difficult to foretell the welcome which competent men and the intelligent public will make to the palace conceived by M. Ponsin. Without doubt this edifice will lend itself to criticism, and in spite of all the combinations and all the skill of the architect, M. Latapy, it is probable that many defects will be found in it. He who wishes to prove too much, says the proverb, proves nothing. This, however, does not change the fact that the authors of the Luminous Palace, in demanding from the glass industry the accomplishment on this occasion of veritable prodigies without disquieting themselves as to whether there was a possibility of realizing them, have forced these glass-workers, so to speak, to furnish a maximum of efforts, to leave their routine habits, to attempt things appearing impossible, which will nevertheless be done.

From yet another standpoint we applaud the enterprise of the Luminous Palace. When it has been seen there under how many forms glass may be practically employed in construction, when its decorative

qualities have been verified after the hesitations and uncertainties of a first attempt, the conception that we formed several years ago will no longer be considered a brilliant Utopia. The experience acquired will permit to be demonstrated what might at first sight appear adventurous, the use of the new materials that we purpose to put at work will be better regulated, and the advantages that may be drawn from them for the comfortable management of the home will be recognized. We ardently hope then that some skilful Mæcenas, an enemy of the routine and the commonplace, will dare to take the initiative and have a habitation of glass constructed which may be called the house of constant temperature, the hygienic house *par excellence*, and which by its scientific, sensible, and ingenious adaptation to the conditions of modern hygiene will entirely merit the title that we wish to give it, the "House of the Future."

DR. JOSEPH PARKER.

BY WILLIAM ELEROY CURTIS.

BISHOP BERKELEY once said that nine tenths of the talent and learning of the British clergy was lost for lack of elocution, and there has been no improvement since his time. Dean Farrar and Canon Wilberforce are considered great orators in England and they are shining exceptions to a monotonous mediocrity. Elocution is not taught in the divinity schools of the United Kingdom, a fact that is painfully apparent in nearly every pulpit in the land. There is more oratory among the dissenters than in the established church. During the convocation of bishops in 1897 in London the late Bishop Perry of Iowa told me that he had attended service at least twice, and often six times a week during the entire summer and had never once heard the Lord's Prayer read with the proper inflection.

The greatest preacher in London, and that means England, at the present day, is Joseph Parker, a Congregationalist, who is well known in the United States, where he has made several lecture tours. His church is known as "The City Temple" and is often confused with the law courts, which are properly called "The Temple Bar," "The Inner Temple," and "The Middle Temple," and is situated not far from them. Dr. Parker has the largest and most influential non-conformist congregation in Great Britain. The Temple is situated on Holborn Viaduct in the midst of the business section of London and only a few blocks from St. Paul's Cathedral, Newgate Prison, and Smithfield Market.

Dr. Parker is an ideal of the robust type of Christianity—a sort of Boanerges. He is a big man, with a massive, rough-hewn head, an abundance of curly hair, a big heart, a big voice, and a big hand, and when he grasps yours in welcome or in parting he is apt to crush some of the small bones. He makes you think of Robert Collyer, and he came from the same county and the same stock. Elihu Burritt, "The Learned Blacksmith," was his father's neighbor. Dr. Parker has many of the characteristics of Henry Ward Beecher also. He was born in Northumberland, where his father was a stone-cutter, a Puritan, who, he has said, had the strength of two men and the will of ten, and Dr. Parker inherits much of his individuality. He is often tempestuous when his soul is stirred and at all times is more like St. Paul than St. John.

Dr. Parker was brought up on the Bible and the Shorter Catechism. He was taught the fiercest kind of theology and the deepest love of prayer. To his father every known man was either good or bad, and the old gentleman's life was spent in praising the one class and anathematizing the other. The son was a street preacher before he was eighteen years old. Then he went to London to assist Dr. Campbell at the old

Whitefield Tabernacle at Moorfields and study theology. Meantime he attended the Free University Schools of London and in 1853, when he was twenty-three years of age, found his first independent pastorate at the old town of Banbury and preached in a chapel there for five years. Then he went to Manchester for eleven years, where he made his fame as a pastor and a preacher and was called to the Old Poultry Chapel in London in 1869, which he accepted on condition that the congregation build a larger church in a more convenient locality.

JOSEPH PARKER, D. D.

Holborn Viaduct was selected and the present temple was reared at a cost of $350,000. There he has preached three sermons a week, two on Sunday and one on Thursday at noon, for almost thirty years. He is now sixty-nine years of age, with forty-six years of practical service behind him. There has been no diminution in his popularity all this time. There are the same crowded audiences Sunday after Sunday and the same remarkable gathering at the noonday service on Thursday, which consists almost exclusively of business men. Those who have been acquainted with the City Temple since it was built find there the faces of men whose hair has whitened and whose steps have grown feeble in the service of the Lord since that institution was established. A great part of the regular congregation have been baptized by Dr. Parker and have grown into manhood and womanhood under his preaching. The congregation represents what some one has called "middle-class respectability." They are neither poor nor rich, although you find in some of the pews men who have acquired fortunes from industry, inventions, or business ability since they have been communicants there.

Dr. Parker's sermons are published regularly in book form and now make a collection of over thirty volumes called "The People's Bible." In addition to this great work he has found time to write a number of other books, including two novels—"Springdale Abbey" and "Weaver Stephen," which have a religious cast—and has prepared a "People's Family Prayer-Book," which contains one hundred short prayers printed in large type for the use of the illiterate classes in family worship and for all possible occasions. This prayer-book has had an enormous circulation. Copies of it are found in the cottages of nonconformists all over Great Britain. Dr. Parker contributes regularly to both the religious and the secular press and magazines. He does not assume to be a scholar nor a theologian. He declines to discuss disputed questions. He says he has no time to analyze the meaning of words or to

split hairs about the terms and phrases of the Bible. He says that he always skips controversial passages of Scripture, and when any one questions him as to his views on this, that, or the other dogma he replies: "My dear friend, I am trying to pump the blood of Jesus into the heart of London and I haven't time to study theology. What I seek is the spirit of truth."

Dr. Parker has received a degree of Doctor of Divinity from The University of Chicago. He has visited that city frequently and has preached and lectured there.

He lives at Lynnhurst Gardens, South Heamsted, in the northwestern suburbs of London, where he has a modest but pretty place, and his politics may be inferred from the fact that there are twenty-six portraits of Gladstone hanging on the walls. "He is the best man in the world," said Dr. Parker to me last summer. "You see portraits of Shakespeare, Browning, and Tennyson about you," he continued, as we were chatting in his study. "They are my favorite authors, and their teachings pervade my preaching. I get more inspiration and ideas from their books than from any other except the Bible. You will find among my books sermons by preachers of every school and doctrine. They are a catholic collection and I love to read them. Nobody relishes the stimulating thought, the delicate scholarship, and the rare refinement of some of the high Anglican writers more than I.

"Yes, I'm a great novel reader, too. When I am tired I take up a story. It's the best kind of diversion.

"My favorite novel? Oh, I have many favorites. I am very easy to please. If I should give you a list of the novels I like it would fill a column. Of recent publications I should say that I have enjoyed 'The Little Minister' and 'Three Men in a Boat' more than any others. What should we do without humor? We should all dry up; and preachers need humor more than anybody else. When I see one of my colleagues looking glum or hear that his sermons are getting prosy I send him a funny story to read. If there is any sap left in his system that is apt to start it in circulation."

I asked Dr. Parker if he thought the world as he saw it was growing better or worse. He smiled a comprehensive sort of smile and said: "Yes, I am very positive the world is growing better, and that mankind is on the up grade. If it were not we preachers had better shut up shop. We haven't yet reached the millennium by any means, but every generation is better and wiser than the last. The child improves upon the father. We have greater knowledge, more conveniences, more pleasure, more piety, and a greater capacity to learn and enjoy. It is impossible for the world to stand still, and if we were not progressing we

MRS. PARKER.

should know it without asking questions or publishing our views in the newspapers. The schools, the churches, the missions, the libraries, the reading-rooms, the free laundries and free baths, the museums, the manual training institutions, the art galleries, the parks, the playgrounds, the improved sanitary laws, the improved lighting facilities, the improved tenement houses, the better pavements, the cheaper traffic, the cheaper newspapers, better food, all these things prove progress and continue to elevate the taste, develop the intelligence, and improve the morals of men.

"It is no longer the highest proof of hospitality to fill your visitor so full of rum that he rolls under the table, as it used to be. The man who drinks and eats the most is no longer a hero. Among all classes it is disreputable to be a drunkard or a glutton.

"There has been an immense improvement among the working class," continued Dr. Parker. "They have made a constant advance in civilization, and although there is still a public house at nearly every cross-roads in England, less money is spent for liquor than formerly and better liquor is drunk. The law punishes men for selling poison. The working classes are beginning to realize the comforts and the sanctity of a home. You will still find four families living in the same room in some of our city tenements, who think there is still space for another lodger in the middle of the floor, but, thank God, they are getting fewer every year. There are still people in existence who think that dirt is healthy and that it adds warmth to the body, and oppose washing because it opens the pores of the skin, but they are passing away like their superstition. In my pastoral visits I still find people who think it is dangerous to open their windows and some of them make a pretence of religion. But I tell them that there can be no piety without fresh air. Sometimes I have been asked to pray in an unventilated garret. 'No,' I reply. 'I cannot call upon God in such an atmosphere. God hates fetid air. He created oxygen and made it free for a plain purpose. So open your windows and let the sunshine and the breezes of heaven purge this room of poison and then I'll pray for you.'

"After all," continued Dr. Parker, "civilization is largely a matter of sunshine and cleanliness and light. The highest civilized people have the most windows in their houses open to the sun and use the most water and burn the most gas."

Many interesting incidents are told of Dr. Parker's experience and to illustrate his marked characteristics. He is always unconventional and likes to say startling things. Not long ago he was called upon to give a charge to a young preacher who was being ordained. "Don't make a fool of yourself by trying to invent a new Bible," said the doctor to the candidate. "Don't try to fettle up a new gospel. You'll find it won't pay. Keep to the old path in the turnpike over which countless millions of pilgrims have passed to heaven."

A lady once asked Dr. Parker if he had a fad.

"Yes," was his reply.

"What is it?"

"Preaching."

"But that is your business. Haven't you any amusements?"

"Yes; preaching."

"But what would you do if you were allowed to select your highest pleasure?"

"Preach."

HISTORY AS IT IS MADE.*

A Treaty of Peace. All reports from Paris agree that the peace commissioners, after negotiations lasting about nine weeks, on December 10th concluded a treaty of peace between Spain and the United States. The text of this document will become public property after the respective governments shall have acted upon it; meantime, press dispatches give the information that the formulated treaty conforms substantially to the terms of the protocol which suspended hostilities. A large number of questions raised by both sides, concerning trade-rights, naval stations, purchase of one of the Carolines, etc., are said to have been remanded to the regular diplomatic channels between the governments. The chief contest of diplomacy at Paris arose over our demand for the cession of the Philippines; repeated delays in reaching a conclusion resulted in practically an ultimatum from our commissioners, to which the Spanish commissioners yielded on November 28, protesting that their rights were given up, for the sake of peace, to the superior force of the victor. It is understood that the treaty provides for a payment of $20,000,000 to Spain for permanent improvements in the Philippines, that Spain retains trading privileges in these islands for ten years on equal terms with the United States, and that the repatriation of Spanish troops and the mutual release of prisoners are covered by its provisions. Intimations that the administration intends to accord trading privileges to all nations on equal terms with the United States during at least the necessary period of military occupation of the Philippines, occasioned world-wide discussion of an "open-door policy," so-called.

JOHN R. TANNER.
Governor of Illinois.

Puerto Rico has been under United States military government since the middle of October. The evacuation of Cuba will probably be accomplished by January 1. General Wood's government of Santiago since its occupation has been conspicuously successful. Some accounts of insurgent disturbances in the Philippines indicate difficulties of military rule in that quarter, and regular army troops are to take the place of volunteers as speedily as practicable.

The President's Message. The second regular session of the Fifty-fifth Congress opened on December 5 with the reading of President McKinley's message. The message was devoted in the main to a history of the war with Spain and the questions growing out of it. The president reviewed all the steps taken since his last annual message: told how the war began; covered the principal points in the conflict of arms, paying tribute to those who fought and those who served at home; and reported the progress of negotiations for peace. About one third of the 21,000 words in the message dealt with this history

* This department, together with the book "Europe in the Nineteenth Century," constitutes the special C. L. S. C. course Current History, for the reading of which a seal is given.

of the war. Discussion of the government of new possessions was specifically deferred until such time as the treaty of peace should be ratified. But the president states that until Congress has legislated otherwise it will be his duty "to continue the military governments which have existed since our occupation, and give to the people security in life and property, and encouragement under a just and beneficent rule." As soon as Cuba comes into our possession and is pacified the president says that "it will be necessary to give aid and direction to its people to form a government for themselves; this should be undertaken at the earliest possible moment consistent with safety and assured success."

GOV. W. E. STANLEY (KAN.).

The message strongly favors the construction of a Nicaragua Canal under control of the United States government, and desires encouragement for the upbuilding of American shipping. He indorses the recommendation of the secretary of war for a permanent increase of the regular army to 100,000 men, including native troops in new possessions, and also approves the recommendation of the secretary of the navy for the construction of fifteen additional vessels for the navy, three of them battleships of the first class. Incidental to the war, too, are the president's reference to the adhesion of both Spain and the United States to the Red Cross convention extending to naval warfare, his suggestion of international cable regulation, and his advocacy of the exemption of private property from seizure at sea during war. The strict observance of neutrality by foreign governments during the war with Spain, our friendly relations with England, reciprocity negotiations with foreign governments, and relations with South American republics are touched upon. The president announces that this government will take part in the Peace Conference proposed by the czar of Russia, and recommends an appropriation of $1,000,000 for an exhibit at the Paris Exposition in 1900. Speaking of growing American interests in China, the president suggests an appropriation for a commission of investigation, and reports that United States troops protect the legation at Pekin and that warships have been stationed at Tien-Tsin. The annexation of Hawaii is welcomed and the report of commissioners on a form of territorial government is announced. From the report of the secretary

GOV. W. A. POYNTER (NEB.).

GOV. HENRY T. GAGE (CAL.).

GOV. FOREST RICHARDS (WYO.).

of the treasury a deficit of $38,047,247.60 is shown for the fiscal year ended June 30, 1898, and the estimated deficiency for the current fiscal year which will end June 30, 1899, is shown to be about $112,000,000. The president renews his recommendation that greenbacks be redeemed in gold and thereafter paid out only for gold, and notes the obvious demand for other currency legislation to insure a sound standard and a safe and adequate currency.

GOV. C. S. THOMAS (COL.).

The message closes with a recommendation for an appropriation for the celebration of the centennial anniversary of the establishment of the national capital at Washington in 1900, and commendation of various labor laws.

Election Aftermath. Most of the governors elected in different states last November take office this month. Photographs of a half-dozen new governors in western states are reproduced herewith, in consonance with the growing political importance of that part of the United States. Illinois did not elect a governor this year, but the attitude of the present incumbent taken in the acute labor troubles in that state make his personality of interest. Among officers of the Virden-Chicago Coal Company, deputies and strikers, Governor Tanner has been indicted by a grand jury for his action in the crisis. Minor results of the late election include the adoption of the referendum in South Dakota, the election of two socialist and two Prohibition candidates for the legislature in Massachusetts, the election of one Prohibition candidate for the legislature in Illinois, and the rise of a Union-Reform party in Ohio to a place on the official ballot.

The Congressman from Utah. Utah, as one of the states of the Union, sends two senators to Washington, but, by reason of her population, only one member of the House of Representatives. The successful candidate for congressman at the November election was Brigham H. Roberts, who admits that he is supporting more than one wife and whose record is that of a Mormon churchman rather than that of a political leader. Mr. Roberts' election created a public sensation, and the question of whether he should be allowed to take

GOV. JOHN LIND (MINN.).

A. M. WADDELL.
Mayor of Wilmington, N. C.

his seat in the Fifty-sixth Congress was widely discussed. Before Congress admitted Utah as a state in 1896, the constitution, adopted by a vote of the people in the territory, provided for the prohibition of polygamy, and the state law has further provided punishment for the practice. Leaders of the Mormon Church also issued an anti-polygamy manifesto, after several years of more or less successful federal legislation against the practice. Mr. Roberts defends himself by asserting that from moral obligations, incurred prior to the passage of the constitution for the state, men can be released by no decree of the church and no act of the state can absolve them. He declares that the enabling act which provides "that perfect tolerance of religious sentiment shall be secured, provided that polygamous or plural marriages are forever prohibited," is not retroactive; that it only prohibits polygamous marriages after the date of enactment. Mr. Roberts was the Democratic candidate and secured a large majority in the states where equal suffrage obtains. His opponents claimed that the Mormon Church defeated him for office the only time he ever ran before, and that thereafter he completely submitted to the church authorities. It is even alleged that, in addition to three wives taken before polygamy was prohibited, he has taken one since. Against the general charge that polygamy is still the rule in the state, Mormon organs suggest that the "elders" demand an investigation at once.

Race Riots and Revolution.

Race troubles in the Southern States, referred to in this department last month, reached a startling culmination in both North and South Carolina in connection with the November elections. In these two states some thirty-five persons are said to have been killed and about fifteen wounded. In South Carolina, according to the most reliable information, rioting began at one of the polling places in the village of Phœnix, Greenwood County, over the voting of a number of negroes. A white Republican, named Tolbert, while keeping account of the registration certificates and ballots cast under the South Carolina law, became the center of a row on account of interference by another white man named Etheridge. In the riot which ensued Etheridge was killed, and during that day and the next encounters between the whites and negroes resulted in the death of another white man and half a dozen colored men—the number of wounded aggregating about the same. Among the latter was another member of the Tolbert family, who is collector of the port of Charleston. All the male members of this family were driven out of the county, including the assistant postmaster at the village of McCormick. The flight of the last-named federal official furnished ground for a federal investigation, which is still in progress.

In North Carolina a veritable revolution in local government took place in the city of Wilmington the day after election, and this revolution was accompanied by the wrecking of the office of a newspaper called *The Record*, edited by a mulatto named A. L. Manly. Back in August, editor Manly had printed an editorial criticizing a speech made by the wife of ex-Congressman Felton, of Georgia, in which she advocated lynching in certain cases. The editorial protested against the attitude of the south-

ern people toward the negro in accusing him of crime, and insisted that "if the papers and speakers of the white race would condemn the commission of crime because it is crime, and not try to make it appear that the negroes were the only criminals, they would find their strongest allies in the intelligent negroes themselves, and together the whites and blacks would root the evil out of both races."

The editorial was made an issue in a campaign against "negro domination," and the result of the election was a sweeping Democratic victory on that issue. The

ALEX L. MANLY.
Editor of "The Record," Wilmington, N. C.

day after the election citizens of Wilmington held a public meeting, adopted resolutions against negro office-holders and white politicians who used the negro vote, and proceeded to make over the local government so far as the negroes and their white allies were concerned. It appears that the legislature, controlled by a Republican-Populist combination, had amended the charter of Wilmington so that five negroes had been appointed by the governor as members of the board of aldermen. A large number of negroes also held minor offices on the police force and in other capacities. The white mayor and his chief of police, together with these negro aldermen, are said to have resigned one by one, the remaining members of the board electing successors chosen by a "Citizens' Committee of Twenty-five." Ex-Representative A. M. Waddell was made the new mayor. Two hundred and fifty special policemen were sworn in to preserve order. The press reports stated that prior to this revolution notice had been served on editor Manly and his friends that *The Record* must be suppressed, and the plant moved out of the town; that, receiving no answer to the demand, Mr. Waddell led a band of citizens to the office and proceeded to demolish the plant. Somebody set fire to the building and it was thoroughly wrecked. Mr. Manly, who fled from the city, states that this destruction of his plant did not take place until after the new government had installed itself.

These occurrences started up an immense amount of discussion in the newspapers of the whole country. Colored people held mass-meetings in many states to protest against what they called the outrages upon their race. The southern press in general, while deprecating the lawlessness which had been exhibited, nevertheless insisted that negro domination in any of the Southern States could, and would, never be endured; and they pointed to the recent labor troubles in Illinois as an instance of the same ineradicable antagonism between the races. Many papers noticed the fact that comparatively few northern journals suggest resorting again to "force bills," and in some instances southern papers declared that the South would rather submit to decreased representation in Congress, according to the Fourteenth Amendment, than to allow the negro vote to dominate their government.

W. C. T. U. Convention. The National Woman's Christian Temperance Union at its convention in St. Paul elected as president, to succeed the late Frances E. Willard, Mrs. Lillian M. N. Stevens, of Maine. Other officers elected were Miss Anna Gordon, of Illinois, vice-president-at-large; Mrs. Susanna M. D. Frey, of Minne-

sota, corresponding secretary; Clara C. Hoffman, of Missouri, recording secretary; Mrs. Frances Beauchamp, assistant, and Mrs. Helen M. Barker, of Illinois, treasurer. Mrs. Stevens, the new president, assisted Miss Willard in the formation of the Maine Union in 1874, was made its treasurer, and three years later its president, being thereafter unanimously reelected year after year. For thirteen years she served as assistant recording secretary of the National W. C. T. U., for one year as recording secretary, and in 1894 was elected vice-president-at-large, in the last-named position assuming large responsibilities, due to Miss Willard's world-wide activities. Mrs. Stevens is an active woman suffragist. She has represented the state of Maine in the National Conference of Charities and Correction; was one of the lady managers of the World's Fair in Chicago; served three years as treasurer of the National Council of Women, and was given the portfolio of moral reform in the cabinet of the council. The St. Paul convention voted to discontinue the "Woman's Temple" in Chicago as an affiliated interest of the W. C. T. U., but the treasurer of the board of Temple trustees, Mrs. Matilda B. Carse, announced that she would devote herself to liquidating the indebtedness against the Temple. A resolution indorsing the Prohibition party was voted down after an attack on the omission of an equal suffrage plank. Other resolutions were passed urging total abstinence, condemning the taking of liquor revenue, demanding prohibition of the liquor traffic, female suffrage, international arbitration, education, good wages, and the "white life for two."

M. CHARLES DUPUY.
Premier of France.

In Church-land. The Rev. Dr. Lyman Abbott, successor of Henry Ward Beecher, has tendered his resignation as pastor of the famous Plymouth Church, Brooklyn, N. Y. Dr. Abbott is editor-in-chief of *The Outlook* (successor to the *Christian Union*, of which Mr. Beecher and Dr. Abbott were editors), a New York weekly journal, and the double duty of pastor and editor constitutes such a tax upon his energies that he follows his physician's advice and will retain only the editorship. Dr. Abbott is sixty-three years of age, and joined Plymouth Church about forty years ago. He left the law profession for the ministry, and served churches in Indiana and New York before becoming identified with the *Christian Union*. Upon the death of Mr. Beecher in 1887, he supplied the Plymouth Church pulpit and was elected pastor in 1888. As one of the foremost American preachers his theological views have aroused criticism; but his reputation as a speaker, supplemented by literary and lecture work, has enabled him to reach and influence an audience accorded to few.

The tendered resignation of the presidency of Yale University by the Rev. Dr. Timothy E. Dwight after a service of twelve years has caused considerable discussion as to whether the tradition of securing a clergyman for this position, in view of the relation of university and church, should be broken.

By instructions from the pope, provision has now been made for the gradual elimination of Roman Catholic Church services (outside the Latin ritual) in other than the English language. That is to say, the pope condemns separate congregations of nationalities like Bohemian, French, German, or Polish, using only their own language, and

urges assimilation into one body of Catholics. To further this assimilation it is directed that children of foreigners, on becoming of age, are to be free to join any Catholic Church where English is spoken, and foreigners, also, who have acquired knowledge of the English tongue, will be permitted to join English-speaking churches. This result is a victory for prelates like Father Hecker, Archbishop Ireland, and Cardinal Gibbons over those who have advocated what has been termed "Cahenslyism," or foreign-language churches.

Justice in France. If justice shall come to Captain Dreyfus, as now seems highly probable, international praise will attach to M. Dupuy, the present premier of France. While the Brisson cabinet succeeded in referring the case to the Court of Cassation and must be credited therefor, its successor has thus far not only upheld that course of action but maintained itself during the most trying conflict between military and civil jurisdictions with dignity and honor. The case of Colonel Picquart, already described in these columns, has also been taken up by the Court of Cassation; the court-martial ordered by General Zürlinden, military governor of Paris, and fixed for December 12 (a measure calculated to prejudice if not to interfere with a decision in the Dreyfus case before the court) has been postponed by decree of the court. The court's investigation of all the evidence concerning the charges against both Picquart and Dreyfus, including the secret documents in possession of the government, ought to satisfy the demands of justice at last. Dreyfus has been notified that he may submit a statement to the court. Danger of a military *coup d' état* is discounted by the apparent lack of a single figure in France who could command sufficient following.

A Republic for a Month. Three Central American states set up a federal republic on the first of November, which lasted but a month. Nicaragua, Salvador, and Honduras organized the federation, covering an area of about 110,000 square miles containing a population of about 2,000,000. Movement to this end began by a treaty in 1895, under which the three countries united on the conduct of foreign affairs, but not until last August was a constitution for the new republic signed. This constitution, modeled on that of the United States, provided for the later admission of Guatemala and Costa Rica, if they should so elect; the presidents of the several states to give way to governors, boundaries remaining the same, except for territory ceded for a national capital. After the inauguration of a provisional government of the "United States of Central America" the presidents of the respective states sought to keep themselves in power as "governors" by force. A revolt broke out against this *régime* in Salvador, and the failure of troops from either of the other two states to sup-

PRINCE GEORGE, OF GREECE.
Governor-General of Crete.

press the revolt caused the federal organizers to formally dissolve the federation November 30.

Other Foreign Events. Other foreign affairs of importance include, first, the consummation of an agreement between France and Italy in the form of a commercial treaty granting mutually favored treatment, except for silk goods, which will remain subject to the maximum tax. Negotiations for this treaty have been carried on for two years and the announcement of its terms is considered the most important international event, as regards Italy, since the conclusion of the Triple Alliance. It is supposed to indicate that France seeks to lead an alliance of the Latin nations to offset the supposed Anglo-American *entente*, and the reported possibility of an Anglo-German understanding as well. The four great powers interested—Great Britain, France, Russia, and Italy—have at last taken Cretan affairs in hand and appointed Prince George of Greece as governor-general or "high commissioner of the powers" in the island. In India, the establishment of the gold standard for the currency is causing serious disturbances in that silver-using country, and the home government has been called upon also to suppress another Indian uprising of from three to six thousand followers of the Mad Mullah. Emperor Francis Joseph of Austria celebrated the fiftieth anniversary of his succession to the throne in spite of the death of his wife, but the elaborate ceremonies that had been planned were not carried out. He signalized the occasion by granting several thousand honors, and immunities to a large number of prisoners. Emperor William of Germany cut short his Palestine tour, finally deciding not to visit Spain, and opened the session of the Reichstag on December 6 with a speech indorsing the proposal of the czar looking toward disarmament, at the same time proposing a number of social and military measures.

THE LATE GEN. DON CARLOS BUELL.

Obituary. On the death record of the month the name of Gen. Don Carlos Buell recalls an active military career in both the Mexican War and the Civil War. General Buell was born in Ohio in 1818, was graduated from West Point in 1841, and assigned to the Third Infantry. He was wounded at Cherubusco in the war with Mexico, and brevetted successively captain and major. From 1848 to 1861 he was assistant adjutant-general, being promoted to brigadier-general during the latter year. He was successively commander of the Army of the Potomac and the Department of the Ohio early in the Civil War. In 1862 he became major-general, and in the campaign in Tennessee was defeated by the Confederates under General Bragg. Thereafter he was ordered to surrender his command to General Thomas, but was restored the same day, and pursued Bragg until superseded in command by General Rosecrans. A commission investigated his conduct, but never made public a report. Following his trial General Buell resigned from the army and went into business.

In England on November 20th occurred the death of Sir George Smyth Baden-Powell, political economist and authority on colonial affairs, who had been a member of Parliament since 1885. His book on Australia is considered standard, and he became an authority on West Indian affairs through his appointment as special commissioner by Mr. Gladstone.

C. L. S. C. OUTLINE AND PROGRAMS.

OUTLINE OF REQUIRED READING.

FOR JANUARY.

First Week (ending January 7).

"Twenty Centuries of English History." Chapter XIV.

"Europe in the Nineteenth Century." Chapter XVIII.

In THE CHAUTAUQUAN:

"The Old Bailey."

Second Week (ending January 14).

"Twenty Centuries of English History." Chapter XV.

"Europe in the Nineteenth Century." Chapters XIX. and XX.

In THE CHAUTAUQUAN:

"Saving the Life."

Third Week (ending January 21).

"Twenty Centuries of English History." Chapter XVI.

"Europe in the Nineteenth Century." Chapter XXI.

In THE CHAUTAUQUAN:

"Lord Melbourne."

"English Journalism."

Fourth Week (ending January 28).

"From Chaucer to Tennyson." Chapter I.

"Men and Manners of the Eighteenth Century." Book I.

In THE CHAUTAUQUAN:

"The American Hotel."

"The Central Element of Organized Matter."

FOR FEBRUARY.

First Week (ending February 4).

"From Chaucer to Tennyson." Chapter II.

"Men and Manners of the Eighteenth Century." Book II.

In THE CHAUTAUQUAN:

"The Education of Englishmen."

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FOR JANUARY.

First Week.

1. The Lesson.
2. Historical Study—Ireland.
3. A Paper—The development of the English Parliament.
4. A Paper—Protestantism in the seventeenth century.

Second Week.

1. The Lesson.
2. Historical Essay—The causes of strife between England and America.
3. Book Review — "The Four Georges," by Thackeray.
4. A Paper—The condition of the English government at the opening of the nineteenth century.
5. A Paper—British dominion in India.
6. Essay—British naval heroes of the eighteenth century.

Third Week.

Gladstone Day—January 14.

"Statesman, yet friend to truth! of soul sincere,
In action faithful, and in honor clear."

1. A Biographical Sketch—William Ewart Gladstone.
2. A Paper—Gladstone and the progress of governmental reform in Great Britain.
3. Essay—The Irish question.
4. A Talk—Gladstone as a financier.
5. Contrasted Character Study — Disraeli and Gladstone.

Fourth Week.

1. The Lesson.
2. Essay—The English vocabulary.
3. A Paper—Chaucer and "The Canterbury Tales."
4. A Talk—The general value of the letters of famous people.
5. A Paper—The scientists of this century.*
6. An Essay—The ideal hotel.

FOR FEBRUARY.

First Week.

1. The Lesson.
2. An Essay—The educational systems of England and America.
3. A Paper—English writers of the fifteenth century.
4. An Essay—The style of eighteenth and nineteenth century literature compared.
5. An Essay—English folk-lore.
6. General Conversation—Important news of the week.

---

*See "Some American Women in Science" in this number of THE CHAUTAUQUAN.

SYLLABUS OF C. L. S. C. READING.

REQUIRED READING IN THE TEXT-BOOKS.

"TWENTY CENTURIES OF ENGLISH HISTORY."

XIV.—THE ERA OF THE PROTESTANT REVOLUTION, 1685 A. D.—1714 A. D.

1. The reign of James II. (pp. 263–268).
   (1) The king's family.
   (2) Persecution of the Covenanters.
   (3) Attitude of Parliament.
   (4) Argyle's expedition.
   (5) Monmouth's rebellion.
   (6) The Bloody Assize.
   (7) The king's attitude toward Parliament.
   (8) Declaration of liberty.
   (9) Acquittal of the seven bishops.
   (10) The arrival of William of Orange.
   (11) The king's flight.
   (12) William and Mary crowned.
2. The reign of William and Mary (pp. 268–272).
   (1) Declaration of Rights.
   (2) Reforms of the administration.
   (3) Events in Scotland.

"Killiecrankie" is a pass of the Grampian Mountains in Scotland.

   (4) Events in Ireland.
   (5) The Grand Alliance.
   (6) The Junto.
   (7) The national debt.
   (8) Peace of Ryswick.
   (9) The Spanish succession question.
   (10) Death of the king.
3. Queen Anne's reign (pp. 273–276).
   (1) The successes of the war.

"Ramillies" [ram'e-leez or rä-meel-ye' or rä-mee-yee']. A town in Belgium.

"Oudenarde" [ou'den-är-de]. A Belgian town.

"Malplaquet" [mäl-plä-kā']. A French town near the frontier of Belgium.

   (2) Union with Scotland.
   (3) Unpopularity of the war.
   (4) Fall of Marlborough.
   (5) Peace of Utrecht.
   (6) Succession to the throne.

REVIEW QUESTIONS.

1. Describe the administrative methods of King James II.
2. Give an account of the overthrow of the king.
3. What limitations were placed on sovereignty at the accession of William and Mary?
4. Describe the reign of William and Mary.
5. Give an account of England's part in the War of the Spanish Succession and tell the result of peace negotiations.
6. When was Scotland united with England?

SEARCH QUESTIONS.

1. When and by whom was the Edict of Nantes issued and to what did it put an end?
2. Of what king was it said, "This marble is not colder than the king's heart"?

XV.—THE HANOVERIAN SOVEREIGNS, 1714 A. D.—1837 A. D.

1. George I. and his reign (pp. 278–280).
   (1) Claim to the crown.
   (2) Method of administration.
   (3) The Riot Act.
   (4) Rising of the Jacobites.
   (5) The Septennial Act.
   (6) The South Sea Bubble.
   (7) Rise of Walpole.
2. Reign of George II. (pp. 280–282).
   (1) Resignation of Walpole.
   (2) The Young Pretender's invasion.
   (3) Troubles in India and America.
   (4) Death of the king.
3. Reign of George III. (pp. 283–291).
   (1) The new prime minister.
   (2) Condition of Parliament.
   (3) The Junius Letters.
   (4) War with America.
   (5) The Irish Parliament.
   (6) Captain Cook's expeditions.
   (7) Object of the younger Pitt's diplomacy.
   (8) The French Revolution.
   (9) Union of Ireland and Great Britain.
   (10) The new cabinet.
   (11) The contest with Napoleon.
      (*a*) Opening of hostilities.
      (*b*) Third coalition.
      (*c*) Trafalgar.
      (*d*) Retaliatory measures.
      (*e*) The Peninsular War.
      (*f*) Waterloo.
   (12) Second war with the United States.
   (13) The regency.
   (14) Abolition of slavery.
4. Reign of George IV. (pp. 291–292).
5. Reign of William IV. (pp. 292–293).
   (1) Demands for constitutional change.
   (2) Passage of the Reform Bill.
   (3) New House of Commons.
   (4) Death of the king.

REVIEW QUESTIONS.

1. Describe the reign of George I.
2. In what wars was England involved between 1727 and 1760?

3. Give an outline of the war between England and the American colonies.

4. Give an account of England's part in the Napoleonic wars.

5. Describe the important governmental events between 1811 and 1833.

SEARCH QUESTIONS.

1. Who said, "They may ring their bells now but they will soon be wringing their hands"? On what occasion was it said?

2. What popular English political writer issued a Federalist newspaper in Philadelphia in the latter part of the eighteenth century? What was the name of the paper?

XVI.—THE VICTORIAN ERA, 1837 A. D.—1897.

1. Facts about Queen Victoria (p. 295).
2. First important public questions (pp. 295–298).
   (1) The People's Charter.
   (2) Free trade agitation.
3. The wars of the century (pp. 299–303).
   (1) Troubles in Canada.
   (2) Chinese War.
   (3) The Afghan troubles.
   (4) The Crimean War.
   (5) The Sepoy Rebellion.
4. The Irish question (pp. 304–307).
5. Legislation of the era (pp. 307–308).
6. Foreign affairs (p. 308).
7. Survey of the British Empire (pp. 308–310).

REVIEW QUESTIONS.

1. Explain the grievances of the Chartists.
2. Give an account of the free trade controversy.
3. Give an account of the wars of this period.
4. Explain the Irish question.
5. Give an outline of the legislation of the period.
6. Give a general survey of Greater Britain.

SEARCH QUESTIONS.

1. Upon what pretext did England declare war against Afghanistan in 1838?

2. Of what English statesman was it said, "He had unrivaled powers for conducting his party into the ditch"?

"EUROPE IN THE NINETEENTH CENTURY."

PART IV.—THE BRITISH EMPIRE.—RECONSTRUCTION WITHOUT REVOLUTION.

Preliminary.

1. The English political evolution (p. 201).
2. Affairs in Ireland (pp. 201–202).
3. Industrial development in the British Empire (pp. 202–203).

XVIII.—THE BRITISH PEOPLE IN EIGHTEEN HUNDRED FIFTEEN.

1. Effect of the French Revolution on England's industrial development (p. 204).
2. Governmental affairs (pp. 204–209).
   (1) Character of the government.
   (2) Representation in the House of Commons.
   (3) Original parliamentary boroughs.
   (4) Effect of increased population.
   (5) The boroughs.
   (6) Franchise in the counties and boroughs.

"Paying scot and lot," *i. e.*, paying one's share of the taxes or rates assessed.

"*Viva voce*." By word of mouth.

   (7) Economic reverses.

REVIEW QUESTIONS.

1. Explain the effect of the French Revolution on the economic development in England.

2. Explain how industrial changes affected representation in Parliament.

3. What is meant by pocket boroughs and rotten boroughs?

4. What limitations were placed upon the right of franchise?

5. What was the cause of social and political discontent?

SEARCH QUESTIONS.

1. In what riots was revived the movement against machinery which was put down in 1812?

2. At the close of the Napoleonic wars what conquests at sea were retained by England?

XIX.—THE BEGINNING OF REFORM.

1. Meaning and purpose of reform in England (p. 210).
2. Attempts at reform before 1830 (pp. 210–212).
3. The reform bills (pp. 212–214).
   (1) The first bill.
   (2) The second bill.
   (3) The third bill.
4. Party reconstruction (pp. 214–215).
5. Acts of the Liberal Parliament (pp. 215–217).
   (1) Abolition of slavery.
   (2) The poor law.
   (3) The factory act.
6. Change of administration (p. 217).
7. Demands of the Chartists (pp. 217–218).

REVIEW QUESTIONS.

1. What attempts at governmental reform were made in England previous to 1830?

2. Give a history of the passage of the Reform Bill of 1832.

3. What was effected by this bill?

4. What reforms were accomplished by the first Parliament under the Reform Act?

5. Give an account of the agitation for a democratic constitution.

SEARCH QUESTIONS.

1. When did the Chartists as a party disappear?

2. What nickname was given Peel, and why?

XX.—THE PROGRESS OF REFORM.

1. Parliamentary reforms in the second half of the century (pp. 219–222).

(1) The bill of 1867.
(2) Contested elections.
(3) Laws protecting the ballot.
(4) Extension of suffrage.
(5) Completion of reform in the Commons.

2. Condition of the House of Lords (p. 222).

3. Local government affairs (pp. 222–224).
(1) Ancient civic methods.
(2) Municipal Reform Act.
(3) Reform in rural government.
(4) London government.

4. Other important reforms (pp. 225–226).
(1) Protective system abolished.
(2) Civil service reform.

REVIEW QUESTIONS.

1. What was the Reform Bill of 1867?

2. How are contested elections decided in England and what laws have been passed for the protection of the ballot?

3. What were the last steps in parliamentary reform?

4. Describe the changes made in local government.

5. Give an account of the adoption of free trade and the civil service reform.

SEARCH QUESTIONS.

1. By whom was England's commercial treaty with France in 1860 arranged?

2. For what free trade advocate was a subscription of £80,000 raised in recognition of his services?

XXI.—THE IRISH QUESTION.

1. The government of Ireland (p. 228).

2. Cause of continued animosities (p. 229).

3. Acceptance of the Act of Union (p. 229).

4. Catholic emancipation and constitutional agitations (p. 230).

5. State church established (pp. 230–231).

6. The Irish Church disestablished (pp. 231–232).

7. The land question (pp. 232–234).
(1) Early conditions of tenancy.
(2) Land Act of 1870.
(3) The Act of 1881.
(4) Land Purchase Act.

8. Agitation for home rule (pp. 234–237).
(1) Parnell's plan.
(2) Leagues suppressed by Parliament.
(3) Home rule bills.

9. Changes in the ministry (p. 237).

10. The Salisbury administration.

REVIEW QUESTIONS.

1. Describe the Irish government.

2. Explain the method by which the acceptance of the Act of Union was secured.

3. Review the troubles caused by religious differences.

4. Give a full account of the land question.

5. Give a history of the agitation for home rule.

SEARCH QUESTIONS.

1. When, where, and for what purpose was the Fenian Brotherhood organized?

2. What noted Irish patriot met a felon's death in 1803?

"FROM CHAUCER TO TENNYSON."

I.—FROM THE CONQUEST TO CHAUCER, 1066–1400.

1. Effect of the conquest on the English language (pp. 9–12).
(1) Character of Old English.
(2) Use of two languages.
(3) The new language.
(4) Introduction of new terms.
(5) Fate of classical Anglo-Saxon.
(6) Intellectual influences.
(7) A new system of verse.

2. The Anglo-Saxon Chronicle (pp. 12–14).
(1) Time of production.
(2) Character of the Chronicle.
(3) Sketch of William the Conqueror.

3. Anglo-Latin chronicles (pp. 14–15).
(1) The authors.
"Ordericus Vitalis" [or-de-rī'kus vi-tā'lis].
(2) Value as history.

4. Norman characteristics (pp. 15–16).
"*Jongleur* [zhôN-glēr']. A minstrel.
"Taillefer" [täy-fār'].

5. The romances (pp. 16–20).
(1) The French metrical tales.
"*Romans d'aventure*" [ro-maN' dä-vaN-tür'].
(*a*) The English translations.
"*Trouvere*" [troo-vēr'].
(*b*) The heroes.
"Sassenach." A Saxon.
(2) Relation of Welsh and English literature.
(3) Geoffrey of Monmouth's work.
(4) The "Brut" of Wace and Layamon.
(5) The legend of the Grail.
(6) The Arthurian cycle.

6. Religious literature (pp. 20–21).

"Ancren Riwle" [angk'ren röl, or, according to the Old English pronunciation, ängk'ren rü'le]. This work first appeared in English, then in Latin. It was prepared for a society of anchoresses in Dorsetshire, probably by Simon of Ghent.

"Ayenbite of Inwyt." "The Againbiting of the Inner Wit," or "Remorse of Conscience." This is a translation made by Dan Michel of Kent of a French treatise composed for Philip III. of France.

"Cursor Mundi." One Old English manuscript translates this, "The Cours of the Werlde." It is based on Cædmon's paraphrase of Genesis and it treats of the course of the world from the creation to the day of the last judgment.

"Villon" [ve-yôN']. A French poet of the fifteenth century.

7. Secular poems and songs (pp. 21-22).

"Fabliaux" [fab-li-ōz']. 8. Amorous religious odes and legends of the saints (pp. 22–23). 9. Alliterative verse (p. 23). 10. The use of English again (pp. 24–28).

(1) Effect of English victories over the French.

"Apparitors." The lowest officers of an ecclesiastical tribunal; a summoner.

(2) Langland's allegory.

"Jacques Bonhomme" [bo-nom']. James Goodman. A contemptuous name which the French nobility applied to the peasant.

(3) The English Bible.

"Vulgate." From the Latin word *vulgata*, made common, general; the Latin version of the Scriptures which the Catholics accept as the authorized version. It was made by Jerome at the close of the fourth century and it was the first book printed.

11. Chaucer and his works (pp. 28–34).

(1) His place in literature.

(2) Biographical facts.

"Boccaccio" [bok-kä'chō].

(3) His early poems.

"Guillaume de Lorris" [ge-yōm' de lo-rē'].

"Machault" [mä-shō'].

"La Fontaine Amoureuse" [fon-tān' a-moor-ēz']. The amorous fountain.

"Parlement of Foules." Parliament of Fowles.

(4) "The Canterbury Tales."

(*a*) The plan.

(*b*) The dramatic element.

(*c*) The characters.

(*d*) Pictures of English society.

(*e*) Literary forms.

(5) Chaucer as a poet.

(6) His modernity.

(7) His naïveté.

"Auctours." An obsolete form of authors.

12. Traces of French and Latin in England (p. 34).

REVIEW QUESTIONS.

1. Explain the effect of the Norman Conquest upon the English language.

2. Describe the development of the epic cycle of Arthurian romance.

3. Give a *résumé* of the early English literature pertaining to the knight, to religion, and to secular subjects.

4. Describe Langland's "Vision of Piers Plowman."

5. Describe Wiclif's work and its influence on literature.

6. Give an account of Chaucer's life and describe his greatest work.

SEARCH QUESTIONS.

1. What was the length of Layamon's poem?

2. What English author once earned a living by singing at the funerals of the rich?

"MEN AND MANNERS OF THE EIGHTEENTH CENTURY."

BOOK I.—POPE AND LADY MARY.

I.—LADY MARY WORTLEY MONTAGU.

1. Biographical details (pp. 9–12).

(1) Birth and parentage.

(2) Social position.

(3) Incident of childhood.

"Kit-cat Club." A London club founded by the Whig party. Its meetings were held at a tavern called "Cat and Fiddle," kept by Cristopher Cat, a man famous for his mutton pies. It is uncertain whether the club took its name from that of the landlord or from the name of his pies, which were called "kit-cats."

(4) Her love for literature.

"Epictetus" [ep-ik-tē'tus]. A famous Stoic philosopher of Phrygia.

"Honoré d'Urfé" [o-no-rā' dür-fā']. A French writer born in 1567. His "Astrée" is a pastoral romance in which he gives much of his family history and of the court of Henry IV. (Henri Quatre).

"Sévigné" [sā-vēn-yā']. A French writer of the seventeenth century noted for her letters.

"*Ouvrage de longue haleine.*" A work for long breath; a tedious work.

2. The table customs of the time (pp. 12–13).

3. The early friends of Lady Mary (pp. 13–14).

(1) Mistress Anne Wortley.

(2) Sidney Montagu.

(3) Sir Edward Wortley Montagu.

"Quintus Curtius." A Roman historian.

REVIEW QUESTIONS.

1. Give biographical facts about Lady Mary Wortley Montagu.

2. Give an account of her literary tastes.

3. Describe the table customs of her time.

4. Who were her early friends?

5. Describe Sidney Montagu and Edward Wortley Montagu.

SEARCH QUESTIONS.

1. On whom did Lady Mary Wortley Montagu first experiment on inoculation? At her return to England on whom was the experiment tried at her suggestion?

2. To what dramatist was Lady Mary related?

II.—THE LETTERS OF LADY MARY.

1. The general character (p. 16).

2. Letter to Mrs. Wortley (pp. 16–18).

3. Concerning her marriage (p. 18).

4. A trip to Cologne (p. 19).

"Helvoetsluys" [hĕl'voot-slois]. A seaport town of the Netherlands.

"Voiture" [voi'tūr]. A carriage.

5. The Vienna court (pp. 19–20).

6. Customs in Prague (p. 20).

7. The journey to Leipzig (p. 21).

8. The Hanover court (pp. 22–23).

"Ananas" [an-an'as]. The name by which the pineapple is called in tropical America.

9. Contents of letters from the East (p. 24).

10. Opinions on England (p. 24).

11. Her English home (p. 25).

REVIEW QUESTIONS.

1. What is the general character of Lady Mary Wortley Montagu's letters?

2. What do her letters tell of life in Vienna and Prague?

3. Give an account of her travels in Europe.

4. Describe the court at Hanover.

5. Where was Lady Mary's English home?

SEARCH QUESTIONS.

1. What are Lady Mary Montagu's important poems?

2. To what is her literary reputation chiefly due?

III.—POPE AND HIS WORKS.

1. Biographical facts (p. 26).

2. "The Rape of the Lock" (pp. 26–33).

(1) Origin of the theme.

(2) Account of practices of the toilet.

(3) Description of a game of cards.

"Ombre." A game of cards usually played by three persons. It was borrowed from the Spaniards.

"Matadores." The three principal trumps in the game of ombre.

"Spadillio." The ace of spades.

"Manillio." The highest card but one.

"Codille" [ko-dil']. A term which means the game is won.

(4) Serving coffee.

"Scylla." Scylla was the daughter of Nisus, the king of Megara, who had a purple lock of hair. Fate decreed that so long as the king retained this lock the city should not succumb to Minos, king of Crete, who was besieging it. Scylla stole the lock and gave it to Minos, who refused to take it, but arranged fair terms for the surrender of the city. Scylla following the boat bearing Minos away was attacked by an eagle—her father changed to that form—and to save her from drowning, a deity changed her into a bird.

(5) Stealing the lock.

"Forfex." The Latin word for shears.

(6) "The Revenge."

"Beau-monde." Fashionable world.

"Rosamonda's lake." A sheet of water which many years ago occupied a corner of St. James' Park, London. It is said to have "been consecrated to disastrous love and elegiac poetry."

REVIEW QUESTIONS.

1. Give a short biographical sketch of Pope.

2. Explain how he obtained the subject for "The Rape of the Lock."

3. What may be learned from this work in regard to the practices of the toilet?

4. Paraphrase the selections quoted from "The Rape of the Lock."

SEARCH QUESTIONS.

1. What is the earliest of Pope's works extant?

2. How old was Pope when the first sketch of "The Rape of the Lock" appeared?

IV.—POPE AND LADY MARY.

1. Pope's literary and social position (p. 34).

"Billingsgate." A fish market, gate, and wharf on the Thames near London Bridge. The coarse language used by the fishwives and other people in the neighborhood has caused the name to be used as a synonym for such language.

2. Pope's Iliad and Gay's verses (pp. 34–36).

3. Lady Mary's letter to her sister (p. 36).

"*De temps en temps.*" From time to time.

"*Grand monde.*" Society; high life.

4. Pope's intercourse with Lady Mary (pp. 36–38).

5. Letters written by Lady Mary (pp. 38–42).

(1) Cure for low spirits.

(2) Gossip about society.

(3) Picture of her daily life.

(4) Account of a birth-night.

(5) Account of entertainments.

(6) The coronation of George II.

6. Lady Mary's life on the Continent (p. 42).

7. Her return to England (pp. 42–43).

REVIEW QUESTIONS.

1. Describe Pope's position in literature and society.

2. On what occasion did Gay address some verses to Pope? Analyze them.

3. Give an account of the intercourse between Pope and Lady Mary.

4. Tell what Lady Mary's letters contain in regard to society.

5. Describe her life on the Continent.

SEARCH QUESTIONS.

1. What sum did Pope receive for his translation of the Iliad?

2. What famous ballad was written by Gay?

REQUIRED READING IN "THE CHAUTAUQUAN."

I.—"THE OLD BAILEY."

1. The building (pp. 323–325).

(1) The new Sessions House.

(2) The exterior.

(3) The interior.

2. The court dignitaries (p. 325).

3. The opening of a court of sessions (p. 326).

4. The privilege of the notables of London (pp. 326–327).

5. Court proceedings (p. 327).

(1) Session of October, 1660.
(2) Legal murders.
(3) Eighteenth century people sentenced at Old Bailey.
(4) Executions.
6. Character of the court.

II.—"THE AMERICAN HOTEL."

1. The principles of success (p. 330).
2. Hotels forty years ago (p. 330).
3. The change of system (pp. 330–331).
4. Specialization in the hotel business (p. 331).
5. Hotel structures (pp. 331–332).
6. Hotel management (pp. 332–333).
7. The old-fashioned hotel (p. 333).

III.—"LORD MELBOURNE."

1. Facts about his life before 1829 (pp. 333–334).
2. In the House of Lords (p. 334).
(1) Opinions on Catholic emancipation.
(2) Attitude toward parliamentary reform.
(3) Chosen as prime minister.
3. His administrations (pp. 334–336).
(1) The first and second.
(2) In the reign of Queen Victoria.
4. Lord Melbourne's conservatism (p. 336).
5. His tendencies toward liberalism (p. 336).
6. His skill as a popular speaker (p. 336).
7. His private life (pp. 336–337).
8. His position (p. 337).

IV.—"SAVING THE LIFE."

1. The dispute of the apostles (p. 337).
(1) Its inopportuneness.
(2) The appearance of the question to-day.
(3) Christ's statement on the question.
2. Those who have saved their lives (pp. 337–339).
(1) The case of William, prince of Orange.
(2) The story of William the Silent.
(3) Lincoln an example.
(4) The Great Example.
3. What it is to lose the life for Christ's sake (p. 339).
(1) Self-surrender.
(2) Surrender of property.
(3) Surrender of wish to be highly esteemed.
4. God's plan and its result (pp. 339–340).
5. The life we save by losing (p. 340).
(1) Spiritual life.
(2) Physical strength.
(3) Mental culture.
6. Consequences of self-surrender (p. 340).
7. The saved life hid with Christ in God (p. 341).

V.—"THE CENTRAL ELEMENT OF ORGANIZED MATTER."

1. General scope of the article (p. 341).
2. The evolution of chemistry (p. 341).
3. Halogen substitution products (pp. 341–342).
(1) Halogen defined.
(2) Action of chlorine on marsh gas.
(3) Definition of substitution.
(4) Varieties of hydro-carbon derivatives.
(5) Effect of substitution on hydro-carbon groups.
4. The law of substitution (p. 342).
(1) Story of its discovery.
"*Soirée*" [swo-rā']. An evening party.
"Brongniart" [brôN-nyär'].
(2) Effect of its discovery.
(3) Principal benefit of the law.
5. Substitution products (pp. 342–343).
(1) Chloroform.
(2) Iodoform.
"Lister." An English surgeon. He introduced the antiseptic method of bandaging.
6. Discovery of the alcohols and the result (p. 343).
7. Arrangement of atoms in the methanes (p. 343).
8. Isomers (p. 343).
9. Relation of alcohol to hydro-carbons (p. 343).
(1) How discovered.
(2) The nature of alcohol.
(*a*) Radical explained.
(*b*) Hydroxyl defined.
(3) The alcohol radicals.
(4) Number of alcohols.
10. The aromatic compounds (pp. 344–345).
(1) Their character.
(2) Kekulé's hypothesis.
(3) Relation to benzene.
(4) Preparation of dyes.

VI.—"ENGLISH JOURNALISM."

1. General survey of the journalistic field (p. 345).
2. The comic papers (p. 345).
3. The newspapers (pp. 345–348).
(1) Those of the United Kingdom.
(2) The *Times*.
(3) The organ of conservatism.
(4) The Liberal organ.
(5) The paper for trades unions.
(6) The great society journal.
"Stick full." A reference to the composing stick, an instrument of metal or wood in which the compositor arranges the type in words and lines.
(7) Imitations of American journalistic methods.
(8) *The Queen*.
4. Characteristics of London papers (p. 348).
5. The make-up of London dailies (pp. 348–349).
(1) First column on the outside page.
(2) Second column.
(3) The editorial column.
(*a*) The leader.
(*b*) The leaderette.

(4) Telegraphic news.
(5) Publication of poetry.
(6) The department of criticism.
6. Leading evening papers (p. 349).
7. Illustrators and work required of the *attaché* (pp. 349–350).
8. The Sunday paper (p. 350).
9. Reports of the Queen's Jubilee (p. 350).

ANSWERS TO SEARCH QUESTIONS IN "THE CHAUTAUQUAN" FOR DECEMBER.

"TWENTY CENTURIES OF ENGLISH HISTORY."

X.

1. The skill with which he performed a secret mission to the emperor Maximilian. 2. With suspicion and ill will.

XI.

1. Queen Elizabeth. 2. Cranmer.

XII.

1. The king's attempt to seize five members of Parliament. 2. The discovery of a private letter to his wife in which he declared that he wished for Ireton and Cromwell "no reward but that for a silken garter they should be fitted with a hempen rope."

XIII.

1. The Parliament of 1654. 2. Cromwell gave to his nominees the title "lords."

"EUROPE IN THE NINETEENTH CENTURY."

XVII.

1. That each should not only refrain from hostile action, but avoid acts which will arouse distrust. 2. The rank of field marshal and the title of Duke of Lamburg were conferred on him, but he declined the latter.

XXII.

1. In the reign of Ivan the Terrible in the sixteenth century. 2. At Nijni-Novgorod.

XXIII.

1. The Grand Vizier. 2. Advised by the Sheikh-ul-Islam and guided by the decisions of the Ulema, a body of expounders of the sacred books.

XXIV.

1. Byron. 2. That he assume sole protectorate over the Christians of the Greek faith in the Turkish Empire.

XXV.

1. A document relating to the troubles in Herzegovina, Bosnia, Servia, and Montenegro prepared by the ministers of Austria, Russia, and Germany, approved by England and France and presented to the Porte in 1876. 2. That Crete should have an autonomous government under the suzerainty of Turkey.

XXVI.

1. The States-General, consisting of a First Chamber of fifty members and a Second Chamber of one hundred members. 2. International Arbitration Conference; the United States, England, France, Austria, Germany, Italy, Spain, Denmark, Sweden, Holland, and Roumania.

XXVII.

1. Rigsdag. 2. In 1895.

XXVIII.

1. During the reign of Charles II. 2. Near Bristol.

XXIX.

1. Ferdinand de Lesseps. 2. One hundred miles; ten years.

XXX.

1. When President Faure visited the czar in 1897, in certain expressions used by both, such as "two friendly and allied nations, guided by a common ideal of civilization, law, and justice."

THE C. L. S. C. CLASSES.

1882–1902.

CLASS OF 1899.—"THE PATRIOTS."

"*Fidelity, Fraternity.*"

OFFICERS.

President—John C. Martin, New York, N. Y.
Vice Presidents—John A. Travis, Washington, D. C.; Charles Barnard, New York, N. Y.; Rev. Cyrus B. Hatch, Pa.; Frank G. Carpenter, Washington, D. C; John Brown, Chicago, Ill.; Charles A. Carlisle, South Bend, Ind.; Edward Marsden, Alaska; William Ashton, Uxbridge, England; Miss Alice Haworth, Osaka, Japan; Miss Frances O. Wilson, Tientsin, China.
Secretary—Miss Isabelle T. Smart, Brielle, N. J.
Treasurer—John C. Whitford, Detroit, Mich.
Trustee—Miss M. A. Bortle, Mansfield, O.

CLASS EMBLEM—THE FLAG.
CLASS COLOR—BLUE.
CLASS FLOWER—THE FERN.

ONE enthusiastic member in Kansas is so far ahead with her reading that she has already finished all but one book of the course. She writes of "Men and Manners": "Rarely have I enjoyed a book as I did that one. We have been having a week of storm, but fortunately I can knit and read, so have been reading while the mittens and stockings were getting ready for three active boys. On a farm, some distance from neighbors, housed up in times of storm from a tendency to rheumatism, I can still forget all discomforts and worries of life, and am never a bit lonesome. How sorry I am I did not know of it before."

CLASS OF 1900.—"THE NINETEENTH CENTURY CLASS."

"Faith in the God of truth; hope for the unfolding centuries; charity toward all endeavor."

"Licht, Liebe, Leben."

OFFICERS.

President—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

Vice Presidents—Rev. John A. McKamy, Nashville, Tenn.; Rev. Duncan Cameron, N. Tonawanda, N.Y.; J. F. Hunt, Chautauqua, N. Y.; Morris A. Greene, Pittsburg, Pa.; Mrs. Mary H. Gardner, Kansas City, Mo.; Mrs. James H. Bentley, Ridley Park, Pa.

Secretary and Treasurer—Miss Mabel Campbell, 53 Younglove Ave., Cohoes, N. Y.

Trustee—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

CLASS EMBLEM—EVERGREEN.

CLASS COLOR—GRAY.

CLASS OF 1901.—"THE TWENTIETH CENTURY CLASS."

"Light, Love, Life."

OFFICERS.

President—Dr. W. S. Bainbridge, New York, N. Y.

Vice Presidents—William H. Mosely, New Haven, Conn.; Rev. George S. Duncan, Washington, D. C.; John Sinclair, New York, N. Y.; Mrs. Samuel George, Wellsville, W. Va.; Dr. Eliza Mosher, Ann Arbor, Mich.; Mrs. T. S. Coleman, San Antonio, Tex.; Mrs. Miller, Jacksonville, Fla.

Executive Committee—Mrs. Ned Arden Flood, Chicago, Ill; Prof. Henry Cohn, Evanston, Ill.; Mrs. Jamison.

Secretary and Treasurer—Miss Harriet E. Barse, 1301 Brooklyn Ave., Kansas City, Mo.

CLASS FLOWER—COREOPSIS.

CLASS EMBLEM—THE PALM.

TO THE TWENTIETH CENTURY CLASS:

My hearty New Year's greetings to my classmates of 1901: Last year it was from Berlin but now come the same good wishes from New York. Our reading this winter seems to me peculiarly fitting. No event in modern times is proving so far-reaching in its effects as the advent of the Anglo-Saxon Alliance. It is no formal compact but an outgrowth of mutual friendship among people of the same religion, the same language, and the same lofty national purpose of civilization. Prejudice is born of ignorance, and the feeling of antagonism in certain minds on both sides of the Atlantic largely finds its basis in false ideas. These prejudices are happily disappearing. We are learning to love the British lion and Uncle Sam is found not to be such a boor after all. The C. L. S. C. this year, along its educational lines, will do much to increase the good understanding now already so well begun. Thus the reading is truly well chosen and worth our careful attention in this epoch year in our national life.

WILLIAM SEAMAN BAINBRIDGE,
34 Gramercy Park, New York.

A CIRCLE in Selma, Ala., many of whom are members of the Class of 1901, are working out a very interesting and new idea under the direction of their leader, Mrs. Jarvis. By this plan, a number of "shut-in" Chautauquans in the community are enrolled as associate members of the circle, doing all their work at home but sending occasional reports of progress to the circle. This prevents these isolated readers from being discouraged, gives the circle an added and pleasant sense of responsibility, and even extends its membership to some isolated readers in the country, who come into town occasionally and find a warm welcome awaiting them at the circle. There are great possibilities in this plan.

CLASS OF 1902.—"THE ALTRURIANS."

"Not for self, but for all."

OFFICERS.

President—Dr. John Henry Barrows, Chicago, Ill.

Vice Presidents—Col. Geo. W. Baiu, Lexington, Ky.; Mr. A. T. Van Laer, New York, N. Y.; Mr. J. T. Robert, Chicago, Ill.; Mr. M E. Baird, Ohio; Madame Emma D. Rupin, St. Louis, Mo.; Miss Harriet Walker, Wellesley College; Mr. Albert Watson, Mt. Vernon, Ill.; Miss Sallie Leonard, Jackson, Mich.; Miss Jewell Gould, Aspen, Col.; Miss Belle Kearney, Flora, Miss.

Honorable Vice Presidents—The Earl and Countess of Aberdeen.

Secretary—Mrs. Josephine Griffith Rabb, East Aurora, N. Y.

Treasurer—Prof. J. C. Armstrong, 530 Lincoln Ave., Pittsburg, Pa.

CLASS FLOWER—AMERICAN BEAUTY ROSE.

A LITTLE pamphlet with an odd title has recently found its way to the C. L. S. C. office in Buffalo. The title reads:

CHAUTAUQUA
ELLER
EN HÖGSKOLA I·HVARJE HEM.

The pamphlet is the work of Prof. Ivar A. Heikel, of the department of philosophy in the University of Helsingfors, Finland, and tells the story of the Chautauqua movement to the people of that country. Even an American Chautauquan can almost read a line like this:

"Chautauqua är ett broderligt, entusiastiskt och konsekvent försök att lyfta, rikta och inspirera den enskildes lif i dess helhet."

It is pleasant to know that Professor Heikel has sent his name for enrollment as a member of the Class of 1902.

"A LONELY mountain reader" in Idaho reports that she can find no one in her community who cares for any reading matter beyond the county paper. Here is a chance for missionary work, but in a kind of field that often takes many years to develop.

GRADUATE CLASSES.

THE '98's are working away with commendable enthusiasm on their class building fund. Miss Morehouse, who photographed the building and sold copies of the photograph to members of the class

for twenty-five cents each, reports that her little camera has cleared five dollars for the fund, and the treasurer sends word that twenty-five dollars has recently been paid by the class to the building committee.

MANY graduates and undergraduates who have not yet visited Chautauqua do not understand the real value and significance of the class building known as "Alumni Hall." It is the center of social class life at Chautauqua and affords cosy and hospitable headquarters for the classes from '86 to 1902. The new classes who are asked to come into the building and contribute their proportion of expense do not at first realize its value, until some veteran Chautauquan tells of the troublous and disorganized times when homeless classes sought in vain for suitable gathering places, then once persuaded they enter upon their new duties with commendable zeal.

GRADUATES will find on other pages of the magazine full announcements of recent courses for graduates. A graduate of '87 who is taking up a special course writes: "It was largely through the influence of these studies that I prepared myself to practice medicine and graduated in 1890 at the medical department of Columbia University."

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"*We Study the Word and the Works of God.*" "*Let us Keep our Heavenly Father in the Midst.*"
"*Never be Discouraged.*"

C. L. S. C. MEMORIAL DAYS.

OPENING DAY—October 1.
BRYANT DAY—November 3.
SPECIAL SUNDAY—November, second Sunday.
MILTON DAY—December 9.
COLLEGE DAY—January, last Thursday.
LANIER DAY—February 3.
SPECIAL SUNDAY—February, second Sunday.
LONGFELLOW DAY—February 27.
SHAKESPEARE DAY—April 23.
ADDISON DAY—May 1.
SPECIAL SUNDAY—May, second Sunday.
SPECIAL SUNDAY—July, second Sunday.
INAUGURATION DAY—August, first Saturday after first Tuesday
ST. PAUL'S DAY—August, second Saturday after first Tuesday.
RECOGNITION DAY—August, third Wednesday after first Tuesday.

SPECIAL MEMORIAL DAYS FOR 1898–99.

ALFRED DAY—October 18.
CAVOUR DAY—November 15.
CROMWELL DAY—December 16.
GLADSTONE DAY—January 14.
DRYDEN DAY—February 18.
WORDSWORTH DAY—March 17.
SHELLEY DAY—April 20.
TENNYSON DAY—May 18.

NEW CIRCLES.

CANADA.—A letter received at the central office from Orillia gives the impression that a great deal of Chautauqua work is being done there.

MASSACHUSETTS.—In Brocton a thriving circle, now numbering twenty-five, has thus far found the course entirely satisfactory.——The interesting Travel Course is being considered by a number of educated people of Somerset who want to know more about "John Bull's country."

NEW YORK.—Brooklyn, that great Chautauqua center, still continues to contribute new names to the C. L. S. C.——That a circle once well organized is sure to find supporters is proved by the increase of numbers in Unionville.——"The Adirondack" is chosen as the name for the circle in Dannemora, concerning which the secretary states: "It is intended to meet every Wednesday night at the various homes of the members. News of the week is considered, papers relating to English history, Europe in the nineteenth century, and other subjects of value are presented. Much interest is manifested and much benefit is anticipated." We hope to hear from them again.——Eight applications are received from Floral Park and more are expected.

PENNSYLVANIA. — An awakening interest in C. L. S. C. matters is felt among a number of people in Laceyville.——In October a circle was organized at Fayette City, when seven names were given as a beginning.——The Chautauquans at Philadelphia are reinforced by five new members.

WEST VIRGINIA.—The loyalty of Chautauquans to their *alma mater* is shown in many instances, as that of a member in West Union, who belongs to the Class of '99. She has used her influence toward organizing a circle, and has met with great success.

SOUTH CAROLINA.—The Dixie Circle, of Greenwood, has made a start with a membership of ten. The president, the superintendent of schools, is a C. L. S. C. graduate of '92 and is a great help to the others who are just beginning.

GEORGIA.—The half dozen readers at Brunswick are conducting their meetings according to the most approved methods.

ALABAMA.—The C. L. S. C. secretary for Alabama gives a complimentary report of the new circle at Montgomery: "The circle numbers twelve

bright, enthusiastic, and earnest women, many of them members of other fine literary clubs. They are beginning the work with avidity and I hope for great results from them. They celebrated Cavour Day in addition to the regular weekly meeting."

TEXAS.—A teacher in the public schools at Dallas has enlisted in the interests of the C. L. S. C. and has founded one circle of twenty-five and is ready to organize another.——A movement toward higher education in Brownwood has resulted in the formation of a circle with a well-chosen president and a good corps of workers.

OKLAHOMA TERRITORY.—The circle at El Reno is well launched on the course for this year.

OHIO.—A class of energetic young ladies of Troy are giving their attention to Chautauqua literature. ——The work is spreading in Toledo, and a list of eight new names are added to the 1902 roll.

ILLINOIS.—A group of bright students are working out the Chautauqua idea at Alton.——Seven names are received from Cropsey.

WISCONSIN.—The secretary of Vincent Circle writes: "Vincent C. L. S. C. of Berlin is now fully organized and in good working order, with a membership of eleven. Ten of our members have been doing the work for two years but only in a desultory manner, but we hope now to accomplish better results."

MINNESOTA.—Five gentlemen of the Swedish Tabernacle, Minneapolis, have become members of the new class. One of them is a graduate of '95 and now is ready to go through the course again.

IOWA.—The activity in C. L. S. C. matters at Des Moines continues and circles are being organized and set to work. The latest reports announce the following: A class in Bible study; University Circle, organized at University Place, with Professor Morgan of Drake University as leader; the evening branch of the Oaklawn Circle, and Clinton Douglas Circle. The latter has become so large that the meetings had to be taken to the parlor of Pilgrim Church. An evening with Howells is planned for raising money for pictures and chairs for the classroom, when a paper on Howells' place in literature and the farce "The Mouse Trap" will be given. Mrs. Shipley deserves much credit for her work in Iowa.

MISSOURI.—A circle at Huntsville, composed entirely of ladies, is finding the work of great benefit.

KANSAS.—Two ladies joined the C. L. S. C. at Carthage Assembly last summer and are now helping to make up the new circle at Scammon, where they reside.——Fall River is to have a well-ordered circle.

COLORADO.—A surprisingly large number of people at Flagler are interested in the C. L. S. C. Fifteen are already promised and several more have almost decided to join.

CALIFORNIA.—A pastor in San José who realizes the value of the Chautauqua reading has organized a circle of seven members.

OLD CIRCLES.

MAINE.—The required literature has been forwarded to the '99's of Springvale. The class has one new member and they all will give their undivided attention to the work.——The Twentieth Century Class has good representatives in the enrolled members at Bangor.——*History As It Is Made* and "Europe in the Nineteenth Century" are to be the subjects for study to be taken up by some of the readers in Lewiston.

MASSACHUSETTS.—Unprecedented enthusiasm is reported from the Chautauquans in Boston, and inquiries are constantly made concerning the system. ——A reunion held recently in Boston will long be remembered by those fortunate enough to be present. Following is the report as given in a prominent journal: "It is a long time since New England Chautauquans have had as enthusiastic a reunion as they enjoyed last Saturday evening in Lorimer Hall, Tremont Temple. Every class was represented, from the first, the Pioneers of 1882, to that of 1902, organized this year. The presence in the city of the bishops of the Methodist Episcopal Church in their annual meeting occasioned the date of this gathering, instead of the usual time in February. After the banquet and the social hour there were addresses by Dr. William R. Clark, president of the New England Chautauqua Assembly, Dr. E. E. Hale, Bishop H. W. Warren of Denver, and the father and founder of the C. L. S. C., Bishop John H. Vincent. Drs. Hale and Warren have served as counselors of this organization from its beginning. Of course the Chautauqua salute—the waving of handerchiefs—was offered again and again to the distinguished speakers. Great enthusiasm followed the announcement that Chancellor Vincent had promised to be present on Recognition Day at Lakeview, or Montwait, as it is now called, next July. Rev. A. E. Dunning presided. The membership of the Class of 1902 in New England is much beyond that of recent years, and the organization enters on its third decade with evidences of renewed interest and a new era of usefulness."——Membership fees received show that a number of people at Malden are busy with the course.

RHODE ISLAND.—The Vincent Circle of Auburn, organized last year, is doing well, regardless of the many outside things which detract from study of any kind.

CONNECTICUT.—The *Sentinel*, of Ansonia, is a friend of the C. L. S. C., as the notices given indicate. There are nine old members and five new ones who have joined in the race this year, and with the well-chosen officers to order the meetings success is assured. Tuesday evening will be the

time for their meetings, and a permanent place has been chosen in which to hold their sessions. We quote from a clipping: "Though the work has been going on quietly, the Chautauqua movement in Ansonia has been gaining steadily in numbers, influence, and interest. The local class, which meets every Tuesday evening in the comfortable and convenient class-room of the Methodist church, now numbers some twenty odd members, Rev. Mr. Saunders, pastor of the Methodist church, and his eldest daughter being the latest enthusiasts in the work. New members will be accorded a welcome, who, with only a little extra effort, can easily make up the required reading." Following this is the program for October 25, which looks exceedingly good and instructive.——"From Chaucer to Tennyson" and "Twenty Centuries" are taken up by about a dozen people in Greenfield Hill who want to know something about the philosophy of literature.——Six members of 1900 in New Haven are still on the road to the golden gate.

NEW YORK.—The Chautauqua work is spreading in Mt. Vernon, showing a number of new members registered for the year.——A devotee of the Chautauqua cause writes favorably of the work in Norwich. ——Eleven readers, graduates and undergraduates, are registered in the Pathfinder Circle, Brooklyn. ——An increase of membership from three last year to eight at the present time makes the readers at Philmont more than ever enthusiastic.——Twelve out of the twenty-two at Newburgh are seniors this year.——The class organized last year at Newfield is still making a good record of membership.—— The memoranda are called for by four readers at Ithaca.——The juniors predominate among the readers registered from Oneida.——The beginning of their senior year finds the Chautauquans at Ridgebury ready to carry on the work with flying colors.——All the undergraduate classes are represented in the membership at Olean.——Two adherents of the Nineteenth Century Class at Stedman have given their attention to a study of the course. ——Able officers are conducting a successful class at Little Falls.——This is the last year of study for the industrious students at Adams Center before they receive their diplomas.——Three names are enrolled from Gouverneur.——A convenient little year book is issued by Hawthorne Circle, Andover, containing all the needed information concerning the circle from the time and place of each meeting during the year to the list of members. The colors of the circle are white and blue, as shown on the blue cover tied with white satin ribbon, their flower is the corn flower, and their motto, "It is worth while to be wise in the use of time." They were organized in 1883 and federated in 1896.——The second year of Epiphany Circle, Brooklyn, begins auspiciously. ——Metropolitan Tabernacle Circle, New York, has added several new names to its numbers.—— The Current History Course is studied with diligence by a circle at Syracuse.——Edwards Circle, Jamestown, has made two valuable additions to its already fine circle.——A few C. L. S. C.'s in Ovid who have finished the regular reading are ready for a special course.——A letter from Billeville speaks for itself. "Our circle, organized some thirteen years ago, is still alive and doing good work. Our graduates are working for more seals and some of our new members are working for diplomas."

NEW JERSEY.—The Dickens and George Eliot Courses are to receive the attention of ten literary people of Vineland. Several new members are enrolled from among the people of this place.——Five names from Trenton are recorded at the central office, all entering on the second year of study.——A number of perspective graduates at Pemberton have started out with a brilliant outlook.——The Basking Ridge Chautauquans will deserve the diplomas which they are to receive on Recognition Day. One member, however, will not finish until 1901.——The Scudder Circle at Jersey City is doing noble work.

PENNSYLVANIA.—Clarion people are interested in intellectual things and the circle readers there are holding to their former record as excellent students. This circle is fortunate in having Dr. Fradenburgh, a Pioneer, and a highly educated man, as a member of their organization.——The second year of the Carlisle Circle, Pittsburg, finds fourteen active workers with an increasing interest in Chautauqua literature.——The Maclarens, Philadelphia, are cheerfully plodding along and have one new member. ——*The Evening Report* gives extended notices of the meetings of the Twentieth Century Circle at Lebanon: from the issue of November 10 we quote: "The meeting of the Twentieth Century Circle, held last evening at the residence of the Misses Bollman, was a very enjoyable affair, the time being spent in literary and conversational interchange and discussion. The paper of the evening, on 'The Myths of Northmen,' by Mrs. Howard C. Shirk, showed very careful study and preparation, was marked by keen perception and clothed in clear and intelligible language, and was very attentively listened to. Then followed a general discussion of a varied and interesting nature, in which the following subjects came in for a liberal share of attention: 'Old Age and its Problems,' 'Animals and the Power Exerted over them by Man,' 'Reminiscences of a trip to Boston,' 'Ministers and their Sacred Office,' 'A Recent Trip to Ephrata,' and the 'Wagnerian Operas.'"—— Concerning the banquet of Redding Circle a member of the class says: "Twenty sat down at the table, which was decorated with ferns and flags in honor of the Class of '99. The napkins, of white tissue paper, were fashioned by ingenious fingers

into little boats, and each carried a flag and a button-hole bouquet of pansies. After we had done full justice to the supper the following toasts were presented: 'The American Navy,' 'Chautauqua Socialism,' 'The German Fatherland,' and 'Retrospect and Prospect.' A presentation was also made to the vice-president and his wife, who were leaving us."——A remarkably well-conducted and interested circle at Scranton has seventy enrollments, all pay members.——The students at Troy are giving a great amount of study to the course. Some of them are seniors.——The Twentieth Century Class has several faithful members in Reynoldsville.——A large percentage of the readers at Ridley Park belong to the Class of 1900.——The circle at Millville is organized and ready for business.——The enrollments from Whittier Circle, at Minersville, show the members to be holding their own in numbers as well as in their usual good work done.——The Irving Circle, Sellersville, has begun the winter's work and in connection with the regular reading the members will study Shakespeare's "Julius Cæsar."

DISTRICT OF COLUMBIA.—Hamline Circle, Washington, send new names and report progress.

WEST VIRGINIA.—A Chautauqua rally was held at Charleston in the State Street Church the latter part of September, when a number of people were interested in the study course. Speeches were made by the last year's president and instructors. The work was well defined and explained, and when an opportunity was given for enrollments, a large number gave their names. Officers were elected and a place of meeting was chosen.——Several renewals of membership come from Parkersburg and four new members are added to the class.——Three seniors at Mason are making ready for graduation.

SOUTH CAROLINA.—A circle numbering fifteen is holding up the standard of the Twentieth Century Class in Summerville.——Chesterfield is the home of several C. L. S. C.'s of 1901.

GEORGIA.—"Europe in the Nineteenth Century," "Twenty Centuries," and THE CHAUTAUQUAN are to receive the attention of Douglas Circle, of Columbus.

ALABAMA.—Four members from Shelby will graduate this year.——The readers at Troy have made a successful beginning.——Membership fees are sent from Selma.

MISSISSIPPI.—The West End Reading Circle of Aberdeen has finished the four years' work and a graduate course is talked of. They are well satisfied with the profit derived from the four years of faithful study.

TEXAS.—One year of study in the C. L. S. C. has given the circle at Nacogdoches a desire for further research, and they will continue to read this year.——An energetic band of Chautauquans is at work at Midland.

OHIO.—The Chautauqua interest has been renewed in Trojan Circle, Troy.——The work accomplished by the sixty circle members in Cleveland last year was satisfactory to every one, and their method of handling such a large number was exceedingly commendable. The circle was divided into six committees, with a captain at the head of each, and the committees took their turns at conducting the entertainment. The society is a flourishing circle, including in its members influential people who are an addition to any organization.——The C. L. S. C. class of Cuyahoga Falls, twenty-six members, commenced the work of the year October 10 with splendid prospects for the year. An address of welcome was given by Dr. W. L. Davidson, one of the field secretaries. Dr. H. W. Carter was elected president and also gave a brief address. They have named their circle the Edward R. Sill Circle, from that man of literary fame whom they loved and admired.——Wesley Circle, Cincinnati, sends half a dozen enrollments.——Holmes Circle at Dayton have elected a competent corps of officers, and with their eleven active members they will make the work of great profit.——Membership Books are ordered for fifteen members of the Class of 1900 now doing the work of the course at Portsmouth.——The year's reading is begun with spirit by the Chautauquans at Mechanicsburg.——The work as carried on in Fremont is good, as a letter from the secretary shows: "A profitable year's work by Croghan Chautauqua Circle was completed at the last regular meeting, held June 21, 1898. Though the total enrollment for the year was not large, yet the average attendance indicated sustained interest in the work. We are looking forward with pleasure to next year's work."——The following is an extract from the report of a meeting held in Toledo: "Members of the C. L. S. C. Alumni Association of Toledo and vicinity and their friends, to the number of about forty-five, held a delightful reunion at the Central Congregational Church, May 31. The meeting was opened by prayer and repeating the Chautauqua mottoes. Miss Brown read a letter of kindly greeting from Rev. Tanneyhill, congratulating the members of the Alumni Association upon their fidelity and expressing bright hopes for the future. Mrs. Foster favored us with a very interesting address upon Gladstone. Rev. Kelsey greeted the Chautauquans in a cordial and happy manner, choosing as his subject 'Profitable Leisure,' and Mr. Lewis, accompanied by Mrs. Rose Clouse-Lewis, rendered two songs in such a manner as to charm all who heard him. A vote of thanks and the Chautauqua salute were given to those who had so kindly favored us and made of the evening a red letter occasion, another happy

Chautauqua mile-stone to mark our way. After joining in singing 'America' the meeting adjourned."——"Sidney Circle held a memorial meeting, June 6, on the death of one of our members, Mrs. Mary A. Barkdull. Mrs. H. C. Robert paid a beautiful tribute to the memory of Mrs. Barkdull in a memorial paper, and a set of resolutions were adopted. Mrs. Barkdull was an enthusiastic Chautauquan, and it was largely through her influence that Sidney Circle was organized. Although she was eighty-one years old she kept in touch with the class and took great interest in all the members and was a wonderful inspiration to us. Mrs. Barkdull was a graduate of the Class of '88. She was a member of the League of the Round Table and of the Guild of Seven Seals. Had she lived to have completed this year's work she would have had twenty-six seals and three crowns upon her diploma. We shall not soon look upon her like again."——The little booklet calendar for 1897–98, sent out by the Worthingtons, of Springfield, contains a schedule of the meetings to be held during the year, with the place and time of meeting, together with the names of the members and the constitution of the circle. This makes a very pretty souvenir as well as a helpful guide for the year's study.——The circle at Fostoria gave a reception and banquet to the alumni early in June, when Dr. Davidson delivered an address.——Five or six new names will be among the students at Fostoria this year.——We are in receipt of a neatly arranged program of the celebration of the "Twentieth anniversary of the organization of Alpha C. L. S. C., Cincinnati, Saturday, November 19, at Palace Hotel." The menu, as given, was well worthy of the distinguished guests who partook of the feast. The toasts were as follows:

Alpha C. L. S. C.
"We're twenty! We're twenty! Who says we are more?"
Bishop John H. Vincent.
"A noble
Of nature's own creating."
The Hall in the Grove.
"A spot that is lovely when sunshine departs
And twilight creeps over the lake."
Our *Alma Mater*.
"Her children adorn all the walks of life."
Friends among the Speaking Leaves.
"A collection of books is a real university."
Our Outside Barbarians.
"They are very respectable members of society."
"Alpha Circle."
A poem written by Rev. Sylvester Weeks, of Eustis, Fla.
Recitation.
The Song of '82 by the Circle.

The *Cincinnati Enquirer* contained the following: "The twentieth anniversary of the organization of the Alpha Chautauqua Literary and Scientific Society was appropriately celebrated at the Palace Hotel, Saturday afternoon, by a banquet, after which a select program was rendered by members present. Letters of regret were read from the following absent friends and members: Bishop Vincent, Edward Everett Hale, Bishop Henry Warren, Miss Kate Kimball, Mrs. Bishop Joyce, Dr. Weeks, of Florida, at whose church the organization was formed just twenty years ago yesterday, Miss Scott, at present engaged in missionary work in India, and Mrs. Kleeman, of Kansas City. After a sumptuous banquet the program was rendered."——The circle organized at Ashland last year find that it takes about a year to get accustomed to systematic study and are now meeting with the greatest success.——With six new members and three graduates to help the circle at Westerville a successful year is assured.

INDIANA.—The C. L. S. C. is very popular in Kokomo, and new members still are being received. The superintendent of schools, a Chautauqua graduate, has given the teachers permission to take up this course in place of the state course for teachers. The Round Table has done much to bring the reading into favor.——Westfield has a good working circle.——The readers at Elkhart are enthusiastic and they find a place for the C. L. S. C. among nine other literary clubs in the city.——The Butler Circle is getting the work well mapped out and the study has begun in earnest.——Faithful attention to the work of the C. L. S. C. characterizes the circle at Salem.——The secretary of Knightstown Circle writes: "Our circle is again hard at work. We have eighteen members already and a few more are talking favorably of the work." A S. H. G. is also a part of the literary life of Knightstown.——A wide-awake Society of the Hall in the Grove is doing effective work in Elwood.——An interesting class of twelve, two joining this year, are making their presence felt in Decatur.——The thirty C. L. S. C. workers in Mishawaka are reading some of Shakespeare's plays.

ILLINOIS.—Three '00's are enrolled from Monmouth to take up the course of the year and one member is working for the seal of the Bible Course.——Reorganizations are reported from Havana, Milton, Oregon, and Hanover.——Harvard and Griggsville are patrons of the C. L. S. C.

MICHIGAN.—The Current History Course and the Bible Course will be taken up by some of the members at Litchfield.——The Chautauqua spirit is manifest among the students at Benton Harbor.——Mason also contributes several members who are continuing the work with diligence.

WISCONSIN.—There will be at least one member in Racine who will graduate this year.——Encouraging letters tell of progressive workers in Madison.

MINNESOTA.—The quarterly report of Pioneer

Circle, Stillwater, says: "During the quarter just ended this circle has had but three meetings. This was due to the fact that at the quarterly meeting held on July 3d it was decided to take a vacation during the warm season. That the members have been refreshed and have brought back with them into the circle all their old-time enthusiasm has been in evidence. Two new members have been added to the roll. One of our members having been discharged, leaves our membership at twenty-six. No failures to report or failures to respond at roll-call are recorded. The studies for the new term, with one exception, were found to be in the library. This missing set has been provided and to which has been added one other, making in all six studies. This report would be incomplete did it fail to mention the musical feature of our programs. Under the direction of Miss Gramling, music of a high order has been and is being provided. That this is a strong feature and one much appreciated is the unanimous sense of this circle."——Glencoe, Minneapolis, and Albert Lea have circles which would add much to the educational standing of any city.

IOWA.—A program of the Manchester C. L. S. C. alumni banquet, held September 16, is beautifully bound with a cover decorated with violets and gilt finishings. A local papers says concerning the event: "The annual C. L. S. C. alumni banquet held at the K. P. hall was largely attended by the members and their friends. The large number present betokens the interest shown in the Chautauqua work, and the same spirit of intellectual research was manifest that has always been on such occasions here and that has justly earned for Manchester the honor of possessing the banner Chautauqua class of the world. The evening's program was opened by music, followed by an invocation by Mrs. Mary Wheeler, after which came the president's address, by Mrs. E. J. Tirrill. Her production was most scholarly and showed a great amount of study and research. As president of the alumni she welcomed the newly graduated class. Mrs. Amy Cary gracefully responded in behalf of the incoming class, which consisted of five members. Mrs. Haeberle offered a tribute to the memory of Mrs. Hamblin and Miss Pierce, former members of the alumni, after which the guests repaired to the dining-room, where refreshments were served. The tables were tastily arranged and beautifully decorated with roses, ferns, and smilax. The main room was decorated with large jars of goldenrod and roses. After refreshments, Mrs. Angie Paul, gracefully presiding as toastmistress, introduced the speakers." ——"The Wild Rose Circle of Sheffield met for organization September 27. Although two have been dropped from our roll for the ensuing year we have, to counterbalance this loss, the addition of four new members, with prospects of one or two more. Our circle now numbers twelve members, and although several are prevented from attending the meeting regularly, much profit and enjoyment are attained."——The end of the year will find several '99's at Newton ready for their diplomas.—— Five married ladies of Coon Rapids find leisure enough to do the educational work of the C. L. S. C. ——Waterloo is the home of Franklin Circle, energetic, wide-awake, and ready to make the most out of the Chautauqua system.—— The readers at State Center are known as the Vincent Circle.—— Promising circles are found at Elliott, Logan, Collins, Dubuque, and Arlington.——The year book of the Creston Society of the Hall in the Grove, organized last year and federated this year, is a beautiful souvenir, containing the names of the officers, places of meeting, and list of members.—— A visit from Bishop Vincent and Dr. Hurlbut in October was the occasion of a reception to these honored gentlemen by the Marion Circle, a class full of great enthusiasm and Chautauqua spirit.—— Renewals of memberships are received from Iowa City, Ottumua, Manchester, and Prairie City.

MISSOURI.—The secretary of Alpha Circle, Marshall, writes: "The Alpha Circle held its annual meeting for the election of officers on September 15. This is the twelfth year, and the limit of thirty members was attained at the first meeting. Much interest is manifested in C. L. S. C. work, and the circle is recognized in our little city of seven thousand inhabitants as a potent factor in self-improvement and in cultivating a taste for solid literature. We anticipate much pleasure in the studies of the English year. The history and literature lessons are thoroughly prepared by members of the circle, and special papers from time to time prove very interesting."——Pilgrim Circle, St. Louis, is beginning with the intention of making the year a profitable one.——Smithville and West Plains report energetic and progressive circles.

KANSAS.—A well-equipped circle is making rapid headway at Paola.

COLORADO.—A letter from Mrs. Eldred of Boulder shows that she is deeply interested in the C. L. S. C. movement. Several other ladies have been reading the course and are all good Chautauqua representatives.

NEW MEXICO.—"The Cactus Circle of Las Vegas reorganized for its fourth year, having successfully closed the work of three years of the required course. The meetings of the past three years have been, with but few exceptions, held regularly once a week, and occasionally a social meeting was given. The members all feel that the time has been well spent, the meetings being both pleasurable and profitable. The work of the closing year is looked forward to with much interest and pleasant anticipations."

TALK ABOUT BOOKS.

Books for Little People.

Cheerful stories of patient endeavor for the happiness of others, in which the actors are full of life and spirit, are the ones that will have the greatest influence for good. Such a book is "A Little New England Maid,"* a story which gives a glimpse of rural life in New England. The tale is an interesting one in spite of the stilted style the author uses in the first few pages, a style that changes to one more vivacious as the story proceeds.

The very little people should have a copy of "Child Stories and Rhymes,"† by Emilie Poulsson. It contains many pretty verses of just the right measure to please a child's fancy and the delightful little stories are about animals, objects, and Baby Bun. The pictures accompanying both rhymes and stories are by no means the least interesting portion of the book and they will prove to be equally attractive to the little folks.

That it takes but little to amuse a child even on holidays is thoroughly understood by the author of a little pleasing book called "Laura's Holidays."‡ The little girl about whom the author writes found some special day to celebrate in every month of the year, and her celebrations were simple ones which revealed a pure, unselfish nature. These twelve stories about one little girl are entertaining and will teach their readers valuable lessons. The volume is attractively illustrated.

The hero of a short tale‖ by Mrs. C. F. Fraser is Fred Norton, or Master Sunshine, as he was generally called, a manly little fellow eight years of age. His influence among the boys at school led to the erection of a beautiful drinking fountain in the village. Though he is remarkably thoughtful and good for a child of his age, he is by no means an impossible lad, and in telling this story about him the author has used a simple, pleasing style.

"A Puzzling Pair"§ is a charming tale of two little adventurers. They are Guy, an artist, and his twin sister Beryl, who lived in a dilapidated manor-house by the sea coast. They are children of the right sort, bright, full of fun, truthful, and most original in speech and action, and the author's spirited style will make the story a popular one. The illustrator has added much to the attractiveness of the book by the marginal pictures which are pen drawings expressing the spirit of the story.

S. J. Brigham takes the little people into a pleasant country full of varied delights by means of "The Pleasant Land of Play."* There he gives them a peep into the wonders of nature, introduces them to brownies and fairies, and lets them play with dolls and the animals of which children are very fond. The volume is made up of prose and poetical pieces, simple in style to suit the child mind. Mary A. Lathbury, the illustrator, is an appreciative interpreter of the writer's fanciful tales.

No book is more fascinating to children than the one filled with fairy tales. The collection of which Mrs. Craik is the editor is most interesting and among the three dozen stories it contains there are some from northern lands and some of Greek origin, with others that have long been popular.† The editing has been admirably done and the illustrations make the volume more realistic.

Fiction.

Ian Maclaren is the author of a series of short stories called "Afterwards."‡ This is also the title of the first tale, a recital full of pathos, in which is delineated the remorse of a man who does not appreciate the goodness and unselfishness of his wife until after her death. Variations of the same theme run through several of the tales, which arouse tender emotions. However, they are in no way gloomy, but they are as delicate letters, reminding us of our duty to our fellow men.

Thomas Nelson Page has made a delightful addition to his stories of southern life in "Red Rock, a Chronicle of Reconstruction."‖ The work combines the faithful portrayal of social conditions and the lifelike delineation of character, for which his short stories are noted, with the dramatic power of a novel. The story, laid "partly in one of the old southern states and partly in the land of memory," opens just before the war, and as it proceeds draws a striking contrast between the pros-

*A Little New England Maid. A story for both boys and girls. By Kate Tannatt Woods. 279 pp. $1.00.——†Child Stories and Rhymes. By Emilie Poulsson. Illustrated by L. J. Bridgman. 89 pp. $1.25.——‡Laura's Holidays. By Henrietta R. Eliot. Illustrated by Etheldred B. Barry. 94 pp. Boston: Lothrop Publishing Company.

‖Master Sunshine. By Mrs. C. F. Fraser. 54 pp. 50 cts. New York and Boston: Thomas Y. Crowell & Company.

§A Puzzling Pair. By Amy L. Feuvre. Illustrated by Eveline Lance. 144 pp. New York and Chicago: Fleming H. Revell Company.

*The Pleasant Land of Play. By S. J. Brigham. Illustrated by Mary A. Lathbury. 151 pp. Boston: Estes and Lauriat.

†The Fairy Book. By the author of "John Halifax, Gentleman." 389 pp. 60 cts. New York and Boston: Thomas Y. Crowell & Company.

‡Afterwards and Other Stories. By Ian Maclaren. 377 pp. $1.50. New York: Dodd, Mead & Company.

‖Red Rock, a Chronicle of Reconstruction. By Thomas Nelson Page. 584 pp. $1.50. New York: Charles Scribner's Sons.

perity then and the desolation later on. The *régime* of the carpet-bagger is set forth without sparing either the scheming northerner or the selfish southerner, but these elements, it is shown, do not fairly represent North or South, and the best people of the two sections come at length to understand and appreciate each other. The intermarriage of northern and southern families ultimately gives assurance that the era of good will has come to remain. B. West Clinedinst has illustrated the story and has entered thoroughly into the spirit of it.

Paul Laurence Dunbar is the author of a short story entitled, "The Uncalled."* The scene is a small town of western Ohio, whose inhabitants are, for the most part, lowly, uneducated folk. The principal character is Fred Brent. When the story opens he is but a child and his inebriate mother having just died and his father, a drunkard, having disappeared several years before, he is adopted by a well-meaning spinster who does not understand child nature. However, she provides him with a good home, educates him, and forces him into a profession of her own choosing. The effect of early training and the result of an unjust prejudice against a respectable person because of unfortunate parentage are strongly portrayed. The story is generally well told and the characters, homely though they be, are interesting in their peculiarities.

A tale of the sea by Gustav Kobbé is called "Miriam."† It is a charming story of the Nantucket Shoals and the South Shoal Lightship told in the dialect characteristic of the seaman, in which the author has happily combined pathos and cheeriness. The artist in his illustrations has reproduced the true spirit of the tale, and the mechanical work makes the volume an example of artistic bookmaking.

"The Lost Word"‡ is the title of an enchanting story by Henry Van Dyke which shows that the name of God the Father is the "key-word of all life and joy and peace." The author's delightfully elegant and concise style, coupled with the inherent interest of the theme, make a combination to which the reader yields himself with great satisfaction. The publishers have encased the work in handsome green and gold covers and printed the text in clear type on pages adorned with an artistic border in black and white. The full-page illustrations are photogravures from drawings made by Corwin Knapp Linson.

Hugh Thomson is the illustrator of a new edition of Mrs. Gaskell's charming story "Cranford."* Nearly half a hundred of the illustrations are colored in delicate tints, and besides reproducing the styles of fifty years ago they show an appreciative study of the story. The remaining sixty pictures are pen sketches, which are equally good representations of the spirit of the text. Green covers bearing an artistic design in gold are used to encase the text.

The publishers of "The Choir Invisible"† rarely put out a handsomer volume than the holiday edition of this product of James Lane Allen's pen. There are eight photogravures designed by Orson Lowell and a large number of pen drawings used as tailpieces, headings of chapters, and text illustrations, all of which show the artist's sympathetic perception of the spirit of the tale. A graceful floral design ornaments the covers.

Virginia in the middle of the seventeenth century was but a young colony, yet there is much in its history that can be utilized in fiction, evidence of which may be seen in "Prisoners of Hope."‡ Just at the time of which this story treats, 1663, slavery in Virginia was in its infancy and planters were employing indentured servants, English criminals imported and sold into slavery for a term of years. Among these latter were Oliverians and Muggletonians, who found in the institution of slavery the conditions favorable for insurrections which were to end in the freedom of the oppressed and the erection of a republic on the shores of the Chesapeake. It is a conspiracy of this kind that makes the foundation of the present story and the leader is Godfrey Landless, an indentured servant on Colonel Verney's plantation. Most ingeniously the author has wrought out a complicated plot in which the colonel's daughter, an English cousin, and Landless are most important actors, and which terminates with a tragedy that perfectly reflects the injustice and intolerance of the period. In delineating the many exciting events, in which Indians also play an important part, the author has not forgotten to portray the manners and customs of the period in a most effective literary style.

"The Story of Gösta Berling"‖ is the work of Miss Selma Lagerlöf, a Swedish woman who in this work evinces real literary power. The hero is a brilliant priest who is deposed because of his intemperate habits. He goes out into the world, sinks to

* The Uncalled. A Novel. By Paul Laurence Dunbar. 255 pp. $1.25. New York: Dodd, Mead and Company.

† Miriam. By Gustav Kobbé. Illustrated by M. J. Burns. 54 pp. 50 cts. New York and Boston: Thomas Y. Crowell & Company.

‡ The Lost Word. By Henry Van Dyke. 71 pp. $1.50. New York: Charles Scribner's Sons.

* Cranford. By Mrs. Gaskell. With a preface by Anne Thackeray Ritchie. With illustrations by Hugh Thomson. 327 pp. $2.00.——† The Choir Invisible. By James Lane Allen. With illustrations by Orson Lowell. 364 pp. $2.50. New York: The Macmillan Company.

‡ Prisoners of Hope. By Mary Johnston. 378 pp. Boston and New York: Houghton, Mifflin and Company.

‖ The Story of Gösta Berling. Translated from the Swedish of Selma Lagerlöf by Pauline Bancroft Flach. 473 pp. $1.75. Boston: Little, Brown and Company.

lowest degradation, is rescued by a woman, the mistress of Ekeby and another most notable character of the tale, and after a year's time he chooses a simple mode of life in which his young wife assists him in bringing happiness to other people. Many characters are required to make this story complete, and with a bold, free hand the author has portrayed some striking personages. The tale is strong and vigorous and into its recital, which is quite epigrammatic in style, the real and the legendary are most happily blended, making a remarkably complete and vivid picture of life in southern Sweden in the early part of this century. The translator, Pauline Bancroft Flach, has done her work well, and her smooth English gives the reader delight.

Ave Roma Immortalis.

In "Ave Roma Immortalis"* Francis Marion Crawford has given another proof of his ability to write literature other than fiction. The two volumes contain very scholarly and interesting essays, modestly called "studies in the chronicles of Rome," in which the history, topography, and art of ancient Rome are delightfully mingled and vividly described. The first five chapters are devoted to the making of the city, the empire, the city under Augustus, and the Middle Age; the following fourteen contain descriptions of as many different regions of the city, and the concluding chapters treat of Leo XIII., the Vatican, and St. Peter's. Fourteen fine photogravure plates of well-chosen subjects add to the beauty of each volume, while numerous smaller illustrations are interspersed through the text. The volumes are very artistically bound, and the workmanship is of the highest order.

Miscellaneous.

One of the classics of American literature, "Poor Richard's Almanack,"† has been added to the "Thumb-Nail Series," published by The Century Company. It is a small, attractive volume bound in full leather, stamped with a design constructed by Miss Blanche MacManus. The contents consist of a frontispiece, Franklin's portrait, a facsimile of the Almanack for 1733, with copies of Poor Richard's proverbs. The editing, which is admirably done, is the work of Benjamin E. Smith, managing editor of "The Century Dictionary."

By means of booklets many choice thoughts and valuable suggestions which have an elevating and ennobling influence on humanity are delivered to a large audience. One of the most admirable series of these publications is the "What is Worth While Series,"* which represents some of the best work of eminent writers. Among the contributors to these excellent booklets are Count Tolstoï, E. S. Elliott, Rev. J. R. Miller, Prof. G. H. Palmer, Rev. Henry Van Dyke, Mrs. Humphry Ward, and others equally well known, who have written short treatises on subjects pertaining to religion, education, literature, and society. These publications are pleasing not only on account of their contents, but the dainty covers and the generally excellent character of their make-up.

Among the many books prepared to help young people solve the problems constantly confronting them in their battle with the world, "Young People's Problems"† deserves praise for its lofty thought and excellent literary character. Some of the problems considered pertain to home life, social relations and duties, and the Christian life. Every one who reads it must be the better therefor.

A new edition of Dr. Miller's delightful meditation on the Twenty-third Psalm‡ has been beautified by eleven full-page illustrations appropriate to the subject and half a dozen vignettes. The cover, bearing a decorative design in green and gold, is also a work of art.

A fine edition of Longfellow's "Hiawatha"‖ recently offered to the public belongs to what is known as "The Faïence Library." Handsome covers of green and gold, a photogravure frontispiece, an artistic title-page, and excellent illustrations are the characteristic features of the make-up of the volume. Nathan Haskell Dole is the author of an interesting introduction and the editor has added a vocabulary and notes to the contents.

"Fables for the Frivolous"§ is the title of a col-

*Ave Roma Immortalis. Studies from the Chronicles of Rome. By Francis Marion Crawford. Illustrated. Two volumes. 332 + 344 pp. $6.00. New York: The Macmillan Company.

† Poor Richard's Almanack. By Benjamin Franklin (Richard Saunders, Philomath). Selections from the Prefaces, Apothegms, and Rimes, with a Facsimile in Reduction of the Almanack for 1733. Edited by Benjamin E. Smith. 248 pp. $1.00. New York: The Century Co.

*The Modern Man and Maid. By Sarah Grand. 37 pp.——The Greatest Thing Ever Known. By Ralph Waldo Trine. 55 pp.——The Study of English Literature. By William Henry Hudson. 31 pp.——The Evolution of the College Student. By William DeWitt Hyde. 39 pp.——New Forms of Christian Education. By Mrs. Humphry Ward. 39 pp.——The Glory of the Imperfect. By George Herbert Palmer, LL.D. 31 pp.——Luxury and Sacrifice. By Charles F. Dole. 63 pp.——What a Carpenter Did With His Bible. By John Franklin Genning. 31 pp.——Ideal Motherhood. By Minnie S. Davis. 34 pp.——The Best Life. By Charles Franklin Thwing, D.D., LL.D. 32 pp.——The Everlasting Arms. By Francis E. Clark, D.D. 31 pp.——The Fruit of the Vine. By Rev. Andrew Murray. 30 pp.——The Secret of Gladness. By Rev. J. R. Miller, D.D. 32 pp.——The Marriage Altar. By Rev. J. R. Miller. 32 pp. 35 cents each.——† Young People's Problems. By J. R. Miller, D.D. 206 pp. 75 cts.——‡ By the Still Waters. By J. R. Miller, D D. 32 pp. 60 cts.——‖ The Song of Hiawatha. By Henry W. Longfellow. 310 pp. $1.00. New York and Boston: Thomas Y. Crowell & Company.

§ Fables for the Frivolous. (With Apologies to La Fontaine.) By Guy Wetmore Carryl. 118 pp. $1.50. New York: Harper & Brothers.

lection of rhymes by Guy Wetmore Carryl. Some of them are old and some are new but all are expressed in pungent, idiomatic English and the morals are distinctly modernized. Take, for example, that of "The Inhuman Wolf and the Lamb Sans Gène":

> The Moral: The wisest lambs they are
> Who, when they're assailed by thirst,
> Keep well away from a public bar;
> For of all black sheep, or near, or far,
> The public bar-lamb's worst.

The book is illustrated with full-page drawings by Peter Newell and is a work of art; heavy antique finish paper, French old style type, handsome cloth binding, deckle edges, gilt top.

The second volume of "The Workers"* is a graphic account of the author's experiences as an unskilled laborer in the West. From the East he went to Chicago, where the crowded condition of the labor field brought him near to starvation and consequently into close contact with the lowest classes of society. As he gradually worked his way up to improved circumstances his association with anarchists, members of labor unions, and different classes of workmen gave him an opportunity to study life as it actually exists in the industrial field of the city. From Chicago he worked his way to the Pacific coast, and in this trip he found an opportunity to investigate the labor problem on a western farm, in mines, and on the cattle ranch. The recital is clear, vivid, and extremely interesting, and it constitutes a valuable contribution to sociological literature.

Eight biographical sketches make up the textual part of a volume† by Ernest Seton Thompson. They are the life histories—true stories the preface says—of eight animals in which the personality of each is brought out in a strikingly realistic manner, and the reader is made to feel the kinship of man and the lower animals. The writer is his own illustrator and the pictures therefore are especially appropriate to the text. A charming originality is observable in the general make-up of the volume, the striking features of which are wide margins, decorated with pen sketches, a unique title-page, heavy paper, with deckle edge, clear type, and covers suggestively stamped.

Miss Grace Leigh Duncan is again the editor of "The Chautauqua Booklet Calendar,"‡ a compilation which shows her fine appreciation of the heart needs of mankind. For each day in the year there is a Scripture text and a quotation from some eminent author which amplifies the thought of the text. The last few pages contain the C. L. S. C. mottoes and directory and some facts in regard to the C. L. S. C. work.

A phase of life which has long since ceased to exist is the theme of a volume entitled, "Home Life in Colonial Days."* The author in her usual bright, lucid style has brought us into touch with the manners and customs of our forefathers and reproduced some interesting obsolete household terms. In the writing and in the illustrations, which are from photographs collected by the author, there are evidences of careful and painstaking research.

"From Day to Day"† is the title of a small volume compiled by Theodore W. Woolsey. It contains three hundred and sixty-five texts of Scripture, and each is rendered into French, German, and Italian, thus greatly increasing the general utility of this little book. In its construction the publishers have given us an example of excellent typography and serviceable binding.

Another compilation especially for busy people is "The Starlight Calendar."‡ For every day of the year there are prose or poetical selections bearing healing and cheerful messages to those who have friends in heaven. The compiler, Kate Sanborn, has culled these choice gems from some of the highest literary sources.

A very timely publication is "Immortal Songs of Camp and Field,"‖ by Rev. Louis Albert Banks, D.D. In a very pleasant, entertaining way the author has given the history of twenty-five songs, most of which pertain to our own national life. "The Blue Bells of Scotland," "The Recessional," by Kipling, and the national hymns of Germany, France, and England are also included in the list. The text is illustrated with portraits of the authors of the hymns and pictures of interesting historical events and plans associated with the songs. The publishers have used large, clear type and heavy paper in the construction of the volume, which has a handsome binding of green and gold.

A book which enters more deeply into the study of nature is "Outlines of the Earth's History."§ The opening chapter, a brief sketch of the develop-

*The Workers. By Walter A. Wyckoff. 378 pp. $1.50. ——† Wild Animals I Have Known and 200 Drawings. By Ernest Seton Thompson. 359 pp. $2.00. New York: Charles Scribner's Sons.

‡The Chautauqua Booklet Calendar for 1899. Edited by Grace Leigh Duncan. 25 cts. Syracuse, N. Y.: University Press, Eaton & Mains.

*Home Life in Colonial Days. Written by Alice Morse Earle. Illustrated by photographs gathered by the author. 470 pp. $2.50. New York: The Macmillan Company.

†From Day to Day. By Theodore W. Woolsey. 365 pp. $1.25. Boston: Little, Brown, and Company.

‡The Starlight Calendar. Compiled by Kate Sanborn. 365 pp. $1.25. Boston and New York: Houghton, Mifflin & Company.

‖Immortal Songs of Camp and Field. By Rev. Louis Albert Banks, D D. With portraits and illustrations. 280 pp. Cleveland, O.: The Burrows Brothers Company.

§Outlines of the Earth's History. A Popular Study in Physiography. By Nathaniel Southgate Shaler. Illustrated. 417 pp. $1.75. New York: D. Appleton & Company.

ment of natural science, is followed by a chapter giving instructions in the methods of nature observation. Then comes the principal theme of the book, which is suggested by the title. An explanation of the formation of the members of the solar system is the first chapter of the history. The atmosphere is the next subject discussed, and in this division the author gives a very full explanation of cyclones, tornadoes, hurricanes, ocean currents, water systems, and the effect of water on the configuration of a continent. Subterranean water systems, glaciers, rocks, and the soil are the other divisions of the history, which he has treated in a very full and complete manner. It is a book full of interesting information, written in dignified English, which, for the most part, is pellucid, though marred occasionally by sentences somewhat complicated and awkward. The illustrations are ample and appropriate to the subject treated.

A book designed especially for mothers is "Child Culture in the Home."* It contains a wealth of excellent suggestions in regard to heredity, training the will and the senses, the cultivation of the emotions and the moral nature, punishment, character, manners, and habits. If every mother would read the book and act upon its suggestions many social problems would be solved.

The rather ambiguous title which Dr. Francis E. Clark has given to a volume of his composition is "Fellow Travellers."† The subject matter, he tells us, was obtained during a journey of about forty thousand miles in the interest of the Christian Endeavor work, and from the great variety of his personal experiences while abroad he has selected the most interesting ones for the contents of the book. Hence he gives us a little of Europe, Asia, and Africa, telling of people, places, and events not usually described by the ordinary traveler. The book will be specially interesting to Christian Endeavorers.

In 1850 M. Huc, a French missionary, sent forth a book entitled "Travels in Tartary, Thibet, and China"‡ which has been out of print many years. A revival of interest in these oriental countries has led to a reprint of this ancient book, the first to give any information in regard to these countries. The dignified simplicity of the writer's style of composition is very impressive, and that with the facts he gives and the incidents, he relates makes entertaining as well as instructive reading. About fifty wood engravings adorn the pages of each of the two volumes, whose unique cover designs will catch the eye of the casual observer.

For a fuller announcement of books and a more complete description of fall and winter literature see pages 181–216 of the December number of THE CHAUTAUQUAN.

* Child Culture in the Home. By Martha B. Mosher. 240 pp. $1.00.——† Fellow Travellers. By Rev. Francis E. Clark, D.D. 288 pp. $1.25. New York and Chicago: Fleming H. Revell Company.

‡ Travels in Tartary, Thibet, and China. During the years 1844-5-6. By M. Huc. Translated from the French by W. Hazlitt. Reprint edition. Illustrated. Two vols. 340+242 pp. Chicago: The Open Court Publishing Company.

BOOKS RECEIVED.

EATON & MAINS, NEW YORK. CURTS & JENNINGS, CINCINNATI.

Brown, Borden P. The Christian Revelation. 50 cts.
Dryer, George H., D.D. History of the Christian Church. Volume II. The Preparation for Modern times. 600–1517 A. D. $1.50.
Newell, Wilbur C. The Truth about Hell. 20 cts.
Bancus, Georgiana. Outline of the Moral Teachings of the Bible. 20 cts.
Bates, J. H., Ph.M. Christian Science and Its Problem. 50 cts.

D. C. HEATH & CO., BOSTON.

Austin, Herbert Ernest., B.Sc. Observation Blanks for Beginners in Mineralogy.

WILBUR B. KETCHAM, 2 COOPER UNION, NEW YORK.

Burrell, David James, D.D. "For Christ's Crown" and other Sermons. $1.50.

LEE AND SHEPARD, BOSTON.

Stratemeyer, Edward. Under Dewey at Manila, or The War Fortunes of a Castaway. $1.25.

LONGMANS, GREEN, & CO., NEW YORK.

Longmans' "Ship" Literary Readers. Books I., II., and III.

MACMILLAN COMPANY, NEW YORK.

Lessing's Nathan der Weise. With Introduction and Notes by George O. Curme. 60 cts.
Goethe's Egmont. With Introduction and Notes by Sylvester Primer, Ph.D. 60 cts.
McLellan, J. A., A.M., LL.D., and Ames, A. F., A.B. The Public School Arithmetic. Based on McLellan and Dewey's "Psychology of Number." 60 cts.
Turgenev, Ivan. Dream Tales and Prose Poems. Translated from the Russian by Constance Garnett. $1.25.
Zola, Émile. The Downfall (La Débâcle), The Smash-up. Translated by E. P. Robins. $1.50.
Doctor Pascal. Translated by Mary J. Lerrano. $1.50.
Smith, William Benjamin. Infinitesimal Analysis. Vol. I. Elementary: Real Variables. $3.25.
Balzac, H. de. Cousin Betty (La Cousine Bette). Translated by James Waring. With a preface by George Saintsbury. $1.50.
A Distinguished Provincial at Paris. (Un grand Homme de province à Paris.) Translated by Ellen Marriage. $1.50.
The Seamy Side of History. (L'Envers de l'Histoire Contemporaine.) Translated by Clara Bell. $1.50.
Seraphta. Translated by Clara Bell. $1.50.
Nichols, Edward L. The Outlines of Physics. An Elementary Text-Book. $1.40.
Wilson, L.L.W., Ph.D. History Reader for Elementary Schools. Arranged with Special Reference to Holidays. 60 cts.

GEO. A. MOSHER, 112 E. FAYETTE ST., SYRACUSE, N. Y.

Baker, Adella L. Famous Authors of America. Brief Sketches of Twenty Prominent American Writers. Illustrated with Photo Blue Prints. 50 cts.
Warner, Ruth Janette. Historic Art. An Aid for Teachers of Public Schools and Colleges. Illustrated with Photo Blue Prints.

CHAS. N. PAGE, DES MOINES, IOWA.

Page, Chas N. Feathered Pets. A Treatise on the Food, Breeding, and Care of Canaries, Parrots, and other Cage Birds. Paper, 25 cts.

THE PETER PAUL BOOK COMPANY, BUFFALO, N. Y.

Clodfelter, N. J. The Gotham of Yasmir: A Satire. $1.00.

FLEMING H. REVELL COMPANY, NEW YORK, CHICAGO, TORONTO.

Cary, Otis. The Man who Feared God for Naught. Being a Rhythmical Version of the Book of Job.
McClure, James G. K., D.D. The Man Who Wanted to Help. 25 cts.
Cuyler, The Rev. Theodore L., D.D. Mountain Tops with Jesus: Calls to a Higher Life. 25 cts.

ROBERTS BROTHERS, BOSTON.

Alger, Abby L. In Indian Tents. Stories. Told by Penobscot, Passamaquoddy, and Micinac Indians. $1.00.

WESTERN UNITARIAN SUNDAY-SCHOOL SOCIETY, CHICAGO.

Crooker, Joseph Henry. The Growth of Christianity.

Booklets of the New Education in the Church Series

Now Ready. In Uniform Binding.

I. The Bible as Literature.

By W. FIDDIAN MOULTON, of St. John's College, Cambridge, England, with an introduction by Professor R. G. Moulton, of the University of Chicago. 16mo, paper, 48 pp., with cover printed in colors, 15 cents.

"The most censorious will not find fault with the writer's reverent treatment of his theme, and most readers will welcome its fresh views of the old book with delighted interest."—*Sunday-School Journal, New York.*

II. The Golden Rule in Business.

By CHARLES F. DOLE. 16mo, paper, 67 pp., with cover printed in colors, 15 cents.

"It is a grand appeal to practical righteousness and pure Christianity, and ought to be read, studied, and obeyed by all who desire to be, in an earnest and vital way, disciples of Christ."—*The Unitarian, Boston.*

III. Picture-Work for Teachers and Mothers.

By WALTER L. HERVEY, Ph.D., President of the Teachers College, New York. 16mo, paper, 91 pp., with cover printed in colors, double number, 30 cents.

In ten well-defined chapters this prominent teacher of teachers demonstrates and illustrates how to use the Bible stories, the legends of the saints, and the masterpieces in sacred art, in the form of stories and lesson illustrations, as aids in the development of child nature.

Sent postpaid on receipt of price by the publishers,

FLOOD & VINCENT,
The Chautauqua-Century Press, MEADVILLE, PA.

POND'S EXTRACT;

not any other kind ef an extract, but

Pond's, and Only Pond's.

Relieves all Pain.

ROYAL
Baking Powder

Made from pure cream of tartar.

Safeguards the food against alum.

Alum baking powders are the greatest menacers to health of the present day.

ROYAL BAKING POWDER CO., NEW YORK.

IVORY SOAP

It will keep Baby's skin soft as a rose leaf

Enameline

is so very clean and DUST-LESS, which is such a comfort to good housekeepers. The old-fashioned brands of Stove Polish do the work in the old-fashioned way. Enameline is the Modern Stove Polish, and that is the difference. Put up in paste, cake or liquid form. Sold in every civilized country on earth.

J. L. PRESCOTT & CO., New York

DYSPEPSIA

Horsford's Acid Phosphate reaches various forms of Dyspepsia that no other medicine seems to touch. It assists the weakened stomach, and makes the process of digestion natural and easy. Pleasant to take.

For Sale by all Druggists.

VOL. XXVIII. FEBRUARY, 1899. NO. 5.

THE CHAUTAUQUAN

HARVARD COLLEGE LIBRARY
JAN 30 1899
CAMBRIDGE, MASS.

DR. THEODORE L. FLOOD, Editor.
MEADVILLE, PA.

VOL. XXVIII. FEBRUARY, 1899. NO. 5.

THE CHAUTAUQUAN

A MONTHLY MAGAZINE.

.....CONTENTS.....

Hon. Justin S. Morrill ..... *Frontispiece*
Maj.-Gen. John R. Brooke ..... *Frontispiece*

REQUIRED READING.

The Education of Englishmen. Illustrated ..... *Mary A. De Morgan.* 427
American Lumber ..... *B. E. Fernow, LL.D.* 436
Lord Derby ..... *T. Raleigh, D.C.L.* 440
Chemistry as a Factor in Modern Civilization ..... *Prof. L. H. Batchelder, A.M.* 444
The Testimony of Human Experience ..... *Rev. David Gregg, D.D.* 449
The English Poor Law and English Charities ..... *C. H. d'E. Leppington.* 452

GENERAL READING.

Mill Operatives in the South ..... *Day Allen Willey.* 458
The Physiology of Alimentation ..... *A. Dastre.* 460
Some American Women in Science. III. Illustrated ..... *Mrs. M. Burton Williamson.* 465
The United States and Her New Possessions ..... *John W. Hardwick.* 473
The Hirschgasse in Heidelberg ..... *Erich Kleinschmidt.* 478
The Spell of the Sea. A Poem ..... *Helen G. Hawthorne.* 482
The Barrys. A Story. Chapters IX.–XI ..... *Shan Bullock.* 483
Liquefied Gases and Air in the Industries ..... *Ernesto Mancini.* 500

HISTORY AS IT IS MADE.

Peace Treaty and Expansion Policy; Governing New Possessions; McKinley's Southern Trip; After the War; "The Father of the Senate"; A New Secretary of the Interior; The Mexican Embassy; Foreign Friction; China, Japan, and the United States; Domestic Concerns; Church Activity; A Record-Making Country; Deaths. Illustrated 505

C. L. S. C. WORK.

C. L. S. C. Outline and Programs 513
Syllabus of C. L. S. C. Reading 514
The C. L. S. C. Classes 521
Local Circles 523
The Chautauqua Literary and Scientific Circle 530
The C. L. S. C. Class of 1902 532
C. L. S. C. Graduate Courses 534
Chautauqua Young Folks' Reading Union 536
C. L. S. C. Graduate Courses 538

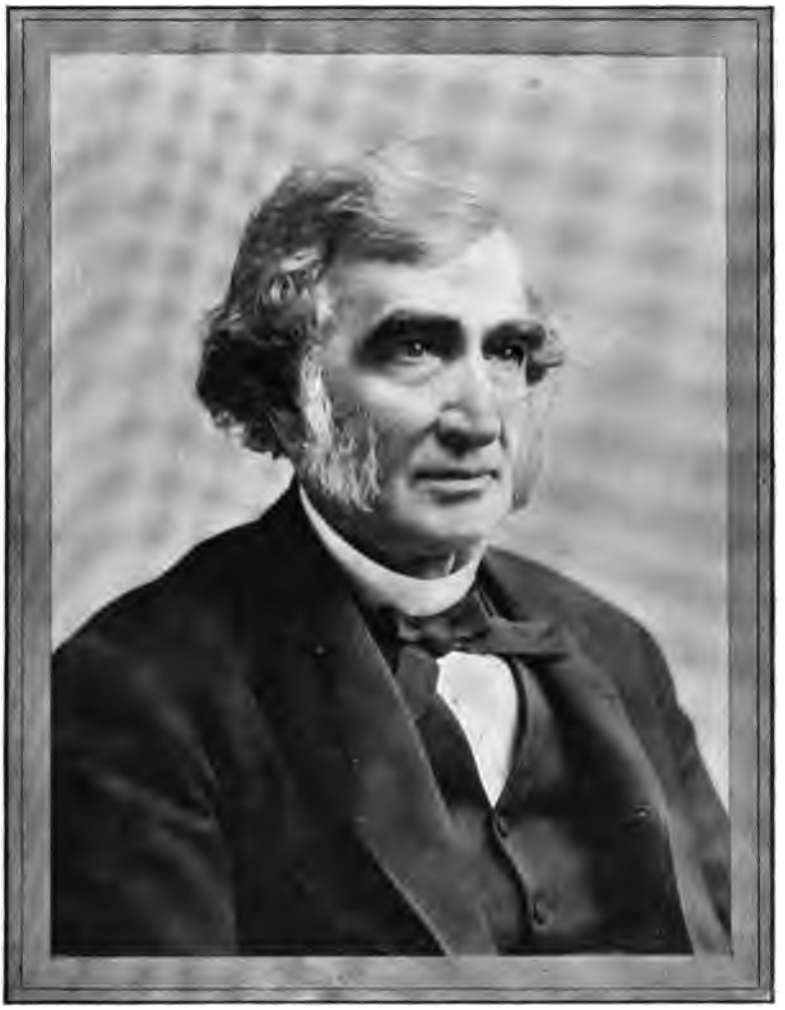
Talk About Books 526

DR. THEODORE L. FLOOD, Editor and Proprietor, Meadville, Pa.

NEW YORK, Bible House.
LONDON, Kegan Paul, Trench, Trübner & Co., L't'd, Paternoster House, Charing Cross Road, W. C.
DUNDEE, SCOTLAND, Rev. Donald Cook, 6 Albany Terrace.

Entered According to Act of Congress, February, 1899, by THEODORE L. FLOOD, in the office of the Librarian of Congress, Washington, D. C.

Yearly Subscription, $2.00.



HON. JUSTIN S. MORRILL, OF VERMONT, LATE SENIOR MEMBER OF THE UNITED STATES SENATE.

See "History As It Is Made."

MAJOR-GENERAL JOHN R. BROOKE, MILITARY GOVERNOR OF CUBA.

See "History As It Is Made."

THE CHAUTAUQUAN.

VOL. XXVIII. FEBRUARY, 1899. No. 5.

HARVARD COLLEGE LIBRARY
JAN 30 1899
CAMBRIDGE, MASS.

OFFICERS OF THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

JOHN H. VINCENT, *Chancellor*, 613 Mooney Building, Buffalo, N. Y. All "personal" letters should be so marked on envelope. LEWIS MILLER, *President*. JESSE L. HURLBUT, *Principal*. *Counselors:* LYMAN ABBOTT, D. D.; BISHOP H. W. WARREN, D. D.; J. M. GIBSON, D. D.; W. C. WILKINSON, D. D.; EDWARD EVERETT HALE, D. D.; JAMES H. CARLISLE, LL. D. MISS K. F. KIMBALL, *Executive Secretary*. A. M. MARTIN, *General Secretary*.

REQUIRED READING FOR THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

THE EDUCATION OF ENGLISHMEN.*

BY MARY A. DE MORGAN.

ETON SCHOOLYARD, WITH PORTION OF CHAPEL.

"WHAT is meant by a public school?" is sometimes asked; and very few could at once say why the term is applied only to certain educational institutions. Generally speaking, by a public school in England is understood one of those ancient endowed schools which are training schools for the Universities of Oxford and Cambridge. More particularly was it formerly applied to nine of these, sometimes spoken of as the sacred nine—Eton, Harrow, Rugby, Winchester,

*The Notes on the Required Reading in THE CHAUTAUQUAN will be found following those on the books of the course, in the C. L. S. C. Department of the magazine.

Shrewsbury, St. Paul's, Westminster, Charter House, and the Merchant Tailors'. But recently the term has been used more freely to describe such large schools as Marlborough and Clifton, both founded in this century, together with such much smaller but more ancient foundations as Sherborne and Uppingham.

First and foremost among the great schools of England stands Eton, which is *per se* the school of the rich. Here are educated the majority of the English aristocracy, and the sons of those parents who, having amassed a fortune, desire that their children should mix with what are considered the highest classes. It is said too that till lately it has been the nursery of far the greater number of English statesmen, politicians, and soldiers. To enumerate the distinguished men who have been educated at Eton would be well-nigh impossible. The Duke of Wellington, Canning, Porson, Lord Chatham, William Pitt, Shelley the poet, Lord Macaulay, Kinglake, Gladstone; and among living men, Lord Hartington, Swinburne, and many others of divers kinds of celebrity, have been Etonians. Very far indeed has the Eton College of to-day wandered from the intentions of the first founders, who designed it as a charity school for poor boys.

In 1441 Henry VI. founded Eton College as a charity school, under the name of the College of the Blessed Mary of Eton, and he brought there from Winchester William of Waynfeete as head master, the first pupils being five and thirty Winchester boys. The early days of the college were not prosperous. Edward IV. after his accession, in his anxiety to obliterate all the work of his Lancastrian predecessor, was almost persuaded to cancel the charter granted to Eton by the late king; and later on, Henry VIII., when he had enriched his exchequer by destroying and plundering the monasteries, very nearly swept away, also for the sake of its emoluments, the new-made college; but Eton escaped to become and remain the leading English school.

ETON MASTERS' HOUSES, FACING CHAPEL.

One interesting point in the early history

of Eton is that from 1534 to 1543 it had for head master Nicholas Udall (afterward also head master to Westminster School), who is now believed to have been the author of "Ralph Roister Doister," the earliest English comedy extant, and probably written for performance by the scholars of Eton.

GALA DRESS OF THE COXSWAIN OF A BOAT AT ETON.

Among all schools Eton is favored in its situation. It stands on the banks of the Thames in Buckinghamshire, and there is no more beautiful stretch of the river than that by which it is divided from the ancient town of Windsor. From Eton a fine view of Windsor Castle and its wooded slopes may be had, and this and the beautiful old building of the college itself must give to the pupils some very happy reminiscences of school life; and if it be an advantage to a growing mind to be surrounded by venerable and beautiful sights, certainly young Etonians are favored beyond most lads.

The constitution of the college is peculiar. Besides the head master, its affairs are governed by a provost and ten fellows, and this governing body robs the head master of the absolute authority which attends his office in some schools. A distinct connection was planned by its founders between Eton and King's College at Cambridge, for which it was intended to be a training school, but of late the bond has been loosened, and Etonians often finish their education at Oxford.

The provost of Eton is nominated by the crown, and his position may be likened to that of chairman of the trustees of the college. His post is a lucrative one, and it is very usual to appoint to it a successful head master on his retirement from his more arduous calling. Seventy-five boys elected on the foundation, and called "collegers" or "king's scholars," keep up the tradition that Eton gives free education to the poor. These collegers are elected by examination, but the charity here has become comparatively nominal, as at the present time the annual bill of a colleger amounts to about £50—a style of education scarcely adapted for the poor and needy.*

The pupils not on the foundation are termed "oppidans," and the cost of their education amounts to something like £250 yearly. Collegers and oppidans wear different dresses, that of the collegers being the usual gown, and of the oppidans the Eton jacket and inevitable chimney-pot hat, a style of costume as unfitted for school life as can be conceived. The collegers live in one building apart, and the oppidans are boarded in licensed boarding houses, kept now chiefly by the masters of the school. Formerly these houses were licensed to either "domines" or "dames," who had no other connection

* According to the statute of Henry VI. the scholars were required to be "poor and needy, of good character, and fairly instructed in Latin grammar and plain song," before admission.

WINCHESTER COLLEGE, FROM THE GARDEN.

with the school; and one lady still continues to be the accredited head of a house, but all these have been eliminated, and their places filled by men, who having inherited their houses are called "dames," a curious title indeed for men. New boarding houses are now however only licensed to masters at the school, whereby the "dame" system, as it is called, is being gradually abolished.

The system of fagging exists at Eton, as at nearly all large public schools, but it is practiced now in a much modified form. Shortly described, it may be said to be the acknowledged right of elder boys to exact from the younger boys (their fags) certain services—menial and otherwise. Its origin is obscure; it may have arisen as an economy, when schools were poor, as it must save expense and labor for the younger boys to black boots, make tea, and boil eggs for the elder ones. But Eton is now exceedingly wealthy, its endowments being nearly £21,000 a year, and there can be no reason why, because a lad is young, he should have to wait upon his schoolmate as his servant, and be exposed to the chance of very great tyranny. In the latter end of the last century, the fagging at Eton was so cruel and excessive that it is reported that often a young fag would be kept up waiting on his master till one in the morning, and being, from lack of time, prevented from getting his own lessons for the next day, would receive a thrashing from the master for the omission. Many instances of heart-rending bullying and cruelty, practiced by the big boys on their fags, were reported, but fagging at Eton has been greatly reformed.

This and many other improvements were mainly due to the exertions of Dr. Hawtrey, who was head master from 1834 to 1853, and who in conjunction with Provost Hodgson wrought most of the changes which have given to the college its present standing. Before Dr. Hawtrey's appointment the number of the pupils had fallen to something under two hundred; the morals and tone of the school were exceedingly low, and terrible abuses had crept in. Dr. Hawtrey at once commenced the work of reform, sweeping innovations were made, and new regulations instituted; the tone of the school improved and the numbers rose to seven hundred and seventy-seven, the highest yet attained.

It must be sadly confessed that Eton does not stand high among schools in the matter of scholarship, and is not so successful as many in obtaining educational honors

for its pupils, but, in spite of this, parents to whom all schools are open choose it for their sons. To understand their action it is necessary to apprehend in some degree the manner in which public school education is viewed in England. It is not only for good teaching that it is adopted, nor indeed does the consideration of how much real knowledge is acquired weigh with many parents as much as some would deem desirable. A belief exists that a lad who has passed with credit through any of the great schools carries with him an indelible stamp which he could not obtain elsewhere, and of the rising generation, but those traits which Englishmen value most highly—self-reliance, courage, and self-command, and that the compulsory fagging for football and cricket is an admirable discipline. Eton has been said to be the best possible school for training the captains and leaders of the world, if not for creating its greatest scholars.

The manners of young Etonians are generally particularly good, in spite of the curious mixture of roughness and luxury which permeates the school. How far either is carried depends greatly upon the house in

HARROW SCHOOLHOUSE, INCLUDING JOHN LYON'S OLD BUILDINGS, NOW RESTORED.

that even the hardness and roughness of the life is developing to character. In nearly all the large schools athletic sports are compulsory, and are held by many to be almost as important a part of school training as the class work itself. Against Eton the complaint is made that as much honor is given in the school to the captain of the boats or the leading football or cricket player as to the senior colleger. But those who defend the system would reply that the sports themselves play a most important part in developing not only the muscles which the boy (if he be an oppidan) boards; each house having its own regulations, and a sensible master being able to do much to soften the roughness or check the tendency to luxury. Where a number of very wealthy lads meet, it is not to be wondered at if an undue reverence for money is developed. In bygone days this was one of the most severe strictures brought against the college, and a story is current of how the young Etonians of some fifty years back, to mark their disapproval of the fact that one of their number, since become a celebrated

divine, owned only one suit of clothes, consigned that suit to the river! But the Eton of to-day could not have been the witness of such a deed.

Besides school work and athletics, Eton boys have a distinct intellectual life of their own. There is a parliament known as "Pop," in which public affairs and politics are discussed, a literary society, meeting weekly to read papers, and from time to time various college magazines have been published—the *Microcosm*, *Miniature*, *Etonian*, *Adventurer*. The third named obtained considerable literary celebrity, having been started by Winthrop Mackworth Praed, and having had among its contributors Nelson, Coleridge, and Moultrie, whose celebrated poem, "Brother's Grave," first appeared in its pages.

No sketch of Eton would be complete without some reference to the picturesque festival known as Eton Montem, which unfortunately Provost Hodgson and Dr. Hawtrey found it necessary to abolish in 1847. The origin of the Montem is obscure. It appears to have derived its name from the boys going once a year to the Hill (*ad montem*), the hill in question being Salt Hill, near Slough. Here the novices, or freshmen, were sprinkled with salt, described in epigrams, and, after some other rites, initiated into the condition of veterans. Later on, the Montem became biennial, and ultimately triennial, and assumed the character of a kind of carnival, at which the students of the college, in gala dress, begged for salt (money) from the public, the object of the collection being nominally to help the expenses of the collegers at the university. In earlier times it is believed that in exchange for money given, salt was offered, but later the money was demanded without any exchange, and extraordinarily large sums were collected, in 1790 having amounted to £500, and three years later to £1,000.

Although the abolition of the Montem in 1847 was a necessary reform, it was not effected without strong opposition, not only at Eton, and something like a riot was feared among the undergraduates of King's College, Cambridge, mostly former Etonians. Dr. Hawtrey expected that they might make a sortie to Eton, to help their younger brethren in their protests. Montem had been visited successively by

JOHN LYON'S ORIGINAL HARROW SCHOOLROOM.

JOHN LYON.
(From the Brass in Harrow Church.)

George IV. and by the queen and Prince Albert, who are said to have been at first strongly opposed to its abolition, but who finally withdrew their objection, as in its last years it had completely lost its collegiate character, and attracted a large and unruly rabble. Fantastic dresses were hired from London costumers by those who attended it, and the drinking and disorder among them were far from edifying. Its place has been partly supplied by the celebration of the 4th of June, the birthday of George IV., when the rowing boys (at Eton termed "wet bobs") race on the river in gala costume, and recitations in Greek and Latin and other performances are given in the college.

Winchester has been described as the "Mother of Eton," and is fifty-four years its senior, but has never approached her daughter in size. The older school was founded in 1387 by William of Wykeham, nine years after the founding of the College of St. Mary Winton at Oxford (now called New College) by the same divine. Winchester, like Eton, was intended for a charity school, and it is governed on somewhat the same plan, by a warden, head master, and fellows. Like Eton, it has strayed far from the intention of the pious founder, and without being as costly as Eton, it belongs entirely to the wealthier classes. Its pupils now number nearly five hundred, and its connection with New College, Oxford, resembles that of Eton to King's College, Cambridge. The boys elected on the foundation, by competitive examination, are here termed college boys, or scholars, and other pupils commoners. College boys live in college, and commoners are boarded in masters' houses.

Fagging exists at Winchester in perhaps as good a form as it can take, for only prefects are allowed to fag, and these prefects are the head boys of the school, into whose hands is given a good deal of responsible management. This system was really initiated by William of Wykeham himself, and it has equally strong advocates and enemies. It is said that it is not good for lads to be trusted with power, and that the prefect of hall at Winchester, who is the head of the school, is an absolute despot. The best head masters appear to agree that placing power in the hands of the most worthy is the surest way to put a stop to the tyranny and bullying which arise wherever boys are massed in large numbers.

JOAN LYON.
(From the Brass in Harrow Church.)

At Eton corporal punishment can be administered only by the head master, but at Winchester "tundings," a slight form of thrashing, may be given by the prefects. The Rev. W. Tuckwell, in his account of Winchester fifty years back, speaks of the brutality of the fagging of that day, and how he suffered from the temper of prefects, who thought nothing of kicking or throwing the fire-irons at their unhappy juniors. But he also relates how, when he himself came to be prefect of hall, he set himself to reform many abuses, and shows how the system gives power to those who are fit to use it, to prevent and modify the many evils, including bullying, which appear to be the great dangers of any form of school life. Old Wykehamists (as Winchester pupils are called) declare that the comradeship between them is stronger and the tie lasts further into life than that of other schools, proving how strong is their love for their *alma mater*.

Every school has its own etiquette, and a slang peculiar to itself. At Eton no boy in the lower part of the school may carry his umbrella furled, and at Winchester the same convention holds good, together with an obligation not to button up all the jacket. How these and many more unwritten rules arose among the boys it is impossible to say. At Winchester the school slang, here called "notions," is so complicated that the conversation of two Wykehamists would be hard to understand by an outsider. One of the first duties of a junior on entering the college is to make himself thoroughly acquainted with this dialect, so as to pass an examination therein, and not only is this examination insisted on, according to the self-made code of the school, on the first entrance of a pupil, but it has to be repeated on his return to school after each vacation.

The following are some specimens of Winchester notions: Each pupil is furnished with a particular form of desk and cupboard in which he keeps lesson books, etc., and this desk and its contents are called his "toys," and the time in which he prepares his lessons "toy time." Another kind of movable desk, used by each boy in the great schoolroom, is denominated "scob," the word supposed to be box backwards. To "brock" means to bully, and a "brockster" is a bully. To "bake" is to sit idle; a "biddy" is a bath; to "swink" and to "sweat" are to work hard (at Eton this is to "sap"); "cud" means pretty; a candle is called a "tolly," and to "thoke upon" to look forward to; while a half holiday is termed a "remedy."

The chief games at Winchester are football and cricket, both compulsory, and there is a limited amount of boating on the Itchen. Prior to 1854–55 Winchester joined Eton and Harrow in the annual cricket match at Lords, but in that year an effort was made by the provost of Eton and warden of Winchester to suppress the match, on the plea that boys remained in London for it, and no match took place in those years. When they were resumed Winchester did not rejoin the larger schools in the contest.

The beautiful old buildings first erected by William of Wykeham still survive, though from time to time, as the school has grown, additions have been made. The town of Winchester itself is of great beauty, owning a cathedral partly built by William of Wykeham, and many ancient churches and monuments.

Here lyeth buryed thee bodye of John Lyon, Late of Preston in this Parrish, Yeoman. Deceased the 11th Daye of October in the Yeare of Our Lord 1592, who hath founded a free Grammar Schoole in this Parrish to have continuance for ever, and for maintenance thereof and for releyfe of the poore and of some poore schollers in the Universities, repayringe of High Ways and other good and charitable uses hath made convayance of lands of good value to a corporacion graunted for that purpose. Prayse be to the Author of al Goodnes who make us followe his good example.

These words beneath a brass in Harrow Church tell us almost all that is known of the founder of Harrow, viz., that he was a yeoman of Preston, near Harrow, who in 1571 made a gift of money for the endowment of a grammar school in his native parish. In 1590 the school statutes were framed, and in these occur a clause which

saved Harrow from becoming a suburban day-school, as it might well have done. This clause states that the "schoolmaster may receive over and above the youth of the inhabitants of this parish as many foreigners as the whole may be well taught." These "foreigners" now really constitute the majority of the scholars, the youth of the inhabitants being represented by the "home boarders," principally the sons of well-to-do people, who for the time being have taken up their residence at Harrow in order to give their sons the combined advantages of home life and public school education. Harrow, being only twelve miles from the metropolis, is particularly accessible as a residential neighborhood for many professional men, whose occupations take them daily into London. All the boys not home boarders live in masters' houses.

Very picturesque are the rules laid down by the Preston yeoman for the management of his school. Directions are given concerning "one master, ruler, or guider of children, one underguider, and six discreet and honest men, who be the governors of the revenues and goods of the school." This last number has since been increased. "Likewise the master shall see that the scholars shall come not uncombed, unwashed, or sloven like." The following is to parents: "You shall find your child sufficient paper, ink, pens, books, and candles for winter"; also: "You shall allow your child at all times a bow, three shafts, bow-strings, and a bracer, to exercise shooting." In former days archery was the great pastime at Harrow, and a picturesque ceremonial took place annually, known as Harrow butts, when twelve pupils, armed with bows and arrows, and clad in white and green satin, with flowing sashes, competed for a silver arrow. It seems a pity that in 1771, Dr. Heath, then head-master, found it necessary to abolish the festival, from the same motives which afterward induced Dr. Hawtrey to suppress Eton Montem, and since that time archery has formed no part of the school curriculum.

There being no river at Harrow, boating is impossible, but cricket and football are compulsory, and at cricket Harrow is pre-eminent. Of the thirteen matches played between Eton and Harrow from 1881 to 1893, Harrow won six, Eton three, and four were drawn.

Of the first buildings, John Lyon's school-house is now used as the fourth form room, but the greater part of the school is modern.

Before 1838 the boys had no chapel of their own, but used the ancient village church. In that year a chapel was begun by Dr. Wordsworth, then head master, which was afterward rebuilt and enlarged by Dr. Vaughan, who was in some ways one of the most successful masters of Harrow. Before his time the pupils numbered less than a hundred, but when he left they had risen to nearly five hundred. The Vaughan Library, of which the first stone was laid in 1861 by Lord Palmerston, himself an old Harrovian, is a lasting monument to the services rendered by Dr. Vaughan to the school.

At Harrow the monitors answer to the prefects of Winchester, though they are not allowed quite as much power as the last named, but the system is the same, and monitors may administer a small amount of punishment to juniors.

The list of Harrovians who have distinguished themselves in life is a long one, including Sheridan and Lord Byron, and in the political world five prime ministers in the first half of the century—Mr. Spencer Percival, Sir Robert Peel, Lord Goderich, Lord Aberdeen, and Lord Palmerston.

Harrow has a school debating society, and has published various school papers. Once in the year, on Speech Day, plays are acted, speeches recited, and music performed by young Harrovians to their friends and relations. Harrow is certainly ahead of other schools in musical education. Chorus singing is a strong feature of the school, and the choral societies, together with the school orchestra, give concerts of great merit. The lower school boys wear ordinary jackets, but the costume of those in the upper forms is a tail-coat, much like an ordinary evening coat, a garb which is both ungainly and uncomfortable.

Only a small amount of fagging is allowed, and though the standard of industry is higher, the school is far less expensive than Eton, and its whole tone less luxurious. As at all public schools ample provision is made for religious training, the boys attending daily prayers, and on Sunday service in the school chapel.

It has been only in this century that Harrow has taken the position she now holds. Prior to that time she appears to have been regarded as a second-class school, and this rise in her fortunes must be attributed to a succession of admirable head masters, including the two Dr. Butlers, father and son, both of whom were particularly successful. The last named, Dr. H. M. Butler, now holds perhaps the most important English educational appointment—that of master of Trinity College, Cambridge. It is said that his successor at Harrow, the Rev. J. E. C. Weldon, will prove worthy of his predecessors, whose traditions he faithfully carries out. The position of head master of Harrow is even a more onerous one than that of Eton or Winchester, as the actions of its head are absolutely unfettered by the authority of provost, warden, or fellows.

Each school has its ancient motto, those of Eton and Harrow being in Latin, and somewhat akin in meaning—"*Floreat Etona*" and "*Stet Fortuna Domus*," while that of Winchester, "Manners Makyth Man," is a truism which all scholars would do well to lay to heart.

AMERICAN LUMBER.

BY B. E. FERNOW, LL.D.

DIRECTOR OF THE NEW YORK STATE COLLEGE OF FORESTRY.

ONE thousand million dollars a year is the wood bill of the people of the United States for materials which they derive from the virgin forest without any expenditure except for harvesting and shaping the treasures, stored for centuries to their use.

About one half of this value represents the cost of firewood, fencing, and other smaller materials, as hoop-poles for coopers' use, hop-poles, bean-poles, and the like, while the other half is for lumber and other material that requires bolt or log size and forms the basis of our enormous wood-consuming industries, which double the value of the raw product, by turning it into houses and barns, cradles and coffins, tools and toys, and the ten thousand uses to which it is adapted and upon which our modern civilization depends.

We hear much about the mining industry, the coal fields, the importance of the iron and steel industry, and about gold or silver we nearly came to civic war. And yet the value of these last two products is not one tenth in their annual output of what the forest furnishes; the iron and steel industry furnishes hardly one half the values of the forest, and if we put all the mineral products, coal, metal, petroleum, and every earthy material together, they fall forty per cent below the value of the forest products, excelling the most valuable portion of these, the sawmill product, only by about fifty per cent. With such a showing we are justified in placing our forest resources as second only in importance to agriculture; wood crops next to food crops, both equally indispensable.

No other country in the world has been so blessed with useful tree species as the United States. While some of the tropic countries excel not only in the extent of their forest areas, but also in the total number of the arborescent forms, they fail to produce the variety of qualities which we find in our forest wealth, and especially are these countries deficient in that class of timber which is most needful for a rapid development of civilization, namely construction materials.

So it happens that Brazil, in spite of its

endless forests, imports its building timber and lumber from us, and the distance to Australia is not large enough to prevent us from supplying those English colonies with lumber from the Pacific coast, in spite of the magnificent forests of eucalyptus and other species, which, good enough for some purposes, are not as serviceable as our conifers.

A combination of qualities, which offers lightest weight compatible with greatest strength and stiffness, ease of working and the possibility of securing large quantities of long and clear material, is what we look for in building timber, and this combination is found in the coniferous woods, the pines, spruces, firs, cedars, redwoods, hemlocks, cypress, which are called "soft woods" by the lumberman although some of them are rather harder than some of those called "hard woods," among which are classed all the broad-leafed trees, no matter whether they are soft or hard, when worked with cutting instruments. In addition to their qualities, the fact that these coniferous species occur gregariously makes their cheap exploitation possible and adds to their value.

The northern temperate zones abound in this class of woods and one may not improperly ascribe to this fact, in part at least, the rapid progress of civilization in these regions. Without such cheaply and easily transported material the development of the vast prairies would have been at least much slower and more difficult, if not impossible. Few of the settlers in those forestless regions realize the debt of gratitude they owe to the forest.

Again, no other country in the temperate zone can boast of such a variety, enormous development in size, and large quantities of these most useful species as we command in the United States. While Europe has only one or two or at best three species of pines, all of the yellow or hard pine tribe, we can offer at least ten useful in the arts, both soft and hard pines, out of the thirty-six native species. Among the soft-wood pines, the king of the pines, the apple among the woods, acceptable in almost any form, the white pine, is ours, and its congener on the Pacific coast, the sugar pine, with its cones a foot and more long, and its trunks towering 250 to 300 feet skyward, with diameters of ten to twelve feet. We boast of the long-leaf pine, or Georgia pine, in the South, which excels among the hard pines, useful for heavy construction, every other pine known to the world.

Again, instead of one species of spruce found in Europe, we count at least four of our five species as timber trees; instead of one fir, we have five or six fit for lumber out of the ten or twelve species, and two instead of one larch. In addition we have, with the bald cypress, two kinds of hemlock, four cedars, and a juniper, two arbor-vitæ, with the redwoods and Douglas spruce, species of which no representatives of useful size or quantity may be found in Europe.

If we were to canvass the deciduous leafed trees, oaks, hickories, birches, walnut, maples, ashes, elms, basswood, magnolias, tulip tree, sweet gum, sycamore, and poplars, we would find the same difference in our favor. Altogether, while it would be stretching the characteristic of a useful tree considerably if we recognized a round twenty-five species as such in Europe we would be within very reasonable limits if we claimed to have in the 450 species indigenous to the United States at least 125 that are useful in the arts and of abundant occurrence, although only forty or fifty appear now quoted in trade papers. Such wealth of material, occurring over large areas, has naturally led to a lavish use of wood and to the development of a lumber industry, which is in its extent and its methods unique in the world.

We use every year eight times as much wood and more than three times as much lumber as the frugal Germans and at least four times as much lumber as our cousins in Great Britain, who have to import almost every stick they use and have learned to substitute stone and iron where possible.

How foolish must those good people appear, who in the fear of the evil consequences of forest destruction propose to stop the lumberman from cutting any more trees. Look around you and learn how much we depend on wood in our daily life;

you will then understand that we shall always need lumbermen to cut and make useful the trees of the forest, albeit we may get the lumberman to adopt somewhat different methods from those he pursues now, or to associate him with the forester who knows how to cut trees so that they will produce a good new crop, or, where needed, plants them.

Not only has the lumberman furnished the most essential materials for the building up of our civilization in all parts of the country, but he has often carried the first germs of civilization into the deepest wilderness of our vast forests.

The lumber business of to-day, which employs, together with the planing mills, nearly 400,000 people and pays annually nearly $150,000,000 in wages, is indeed a very different affair from what it was a hundred years, nay, fifty years ago, when logging was confined to the eastern coast and river courses, which furnished the means of transportation for the bulky material.

It is the development of the railroad system that has changed the methods of lumbering, just as it has changed all other kinds of business.

Before the era of railroad building the lumbering went on in a hand-to-mouth fashion and most of the sawing was done in connection with grist-mills, charging their toll just as they did for flour, the lumber being mainly for home consumption or else going to the mouth of the river to be carried by vessel to home and foreign markets. That this petty method of doing business lasted until the middle of the century is attested by the census of 1840, where the 31,560 sawmills are credited with a product of only $400 per mill; this product per mill rose to $6,508 in 1870, $9,073 in 1880, and more than doubled in the next decade, namely to $19,212 in 1890, showing how the character of the business has changed.

In 1860, although pine lumbering in the Northwest had already begun to be a leading industry, the great logging streams of later years were hardly yet mentioned.

It was only after the war, when the development of the railroad system opened up virgin forest areas of vast extent and wealth, that the enormous expansion of the lumber trade with its modern machinery and modern methods began. Railroads have not only brought distant lumber centers within easy reach of markets but they have even penetrated the woods themselves, connecting the mill directly with the sources of supply, reducing although not superseding the river drive.

Under the enormous competition thus stimulated and with ever new virgin woods coming to development, most wasteful treatment of the seemingly boundless and inexhaustible forest wealth was the consequence, and now we are only just learning that there is no such thing as inexhaustible supplies. We are not only becoming aware of the fact that our forest area is comparatively small, considering the vast extent of our country and our rapidly growing population, but the really good timber in it is not so plentiful as the acreage might lead one to think and it is confined to certain localities.

There are large areas of woodlands encumbering the soil, but economically speaking they are not of any value, being covered with scrubby growth of tree weeds which prevent the recuperation of the valuable kinds that have been called out by the lumbermen, and thus the ground is left to their undesirable competitors.

Hence, while there are about 500,000,000 acres of land covered with some kind of forest growth, thousands, nay millions of these acres do not contain any merchantable material or even promising young growth.

Our annual cut has reached such dimensions that if we had our forest area in as good condition and as well managed as the German state forests are, we would have to have 600,000,000 acres in first-class order to furnish annually our requirements. We would then cut every year say six million acres, allowing 100 years in the average for the trees to grow that are to be cut—at present most of the trees from which we derive our lumber are over 150 or 200 years, and the giants on the Pacific coast have taken 500 to 1,000 years and more to reach their dimensions.

Under present conditions, when we only exploit our virgin forests to secure the five and one half billion cubic feet of log timber which are to furnish our forty billion feet of lumber, timber, and bolts, we cull over probably not less than ten to twelve million acres, taking out the best kinds and best trees and leaving the ground to the undesirable kinds and trees, preventing a satisfactory young growth to take the place of what we have removed. And if perchance a young growth starts, a natural phenomenon—natural only, or mainly, to the United States—the ever-recurring forest fires will sweep it off.

It is now even admitted by lumbermen, those who have a fuller acquaintance with the country, that our "inexhaustible" forest wealth is sufficiently reduced to call for restorative measures, such as the art of forestry teaches.

The state of New York has perhaps taken the most advanced step in that direction by not only buying up the culled forest lands in the Adirondack Mountains but by establishing a State College of Forestry in connection with Cornell University, where the art of forestry is to be taught as a profession and the foresters to handle and recuperate the state property are to be educated.

The geography of our lumber supplies is such that we can recognize lumbering regions, each of which furnishes the bulk of one or more staples to the lumber market. Thus Michigan, Wisconsin, and Minnesota monopolize the white pine market; the Southern Atlantic and Gulf States contain the bulk of our hard pines, while the hardwoods are mainly furnished by the Central States, with Tennessee the greatest producer.

The state of Maine, the Pine-tree State, has long ceased to supply much of the white pine, from which it derived its name. Spruce for pulp is now its principal lumber product, although the birch and maple in which it abounds but which are hardly yet cut to any large extent will some day become more valuable. Spruce also is the main lumber tree of New Hampshire, while the rest of the New England States are cut out of all valuable coniferous material and also largely of their hardwoods, the majority of the woodlands being coppice growth, fit for firewood and small dimension material only.

The state of New York, which of all the states in 1850 furnished still the largest amount of lumber, especially white pine, now only has spruce and hemlock left to furnish staple goods for the market and hardly counts among the lumbering states. Pennsylvania is in the same condition, hemlock being its main staple, although some white pine and hard woods still furnish the basis for its large sawmill capacity. Williamsport once was the great lumber market of the United States, but by the beginning of the seventies this prestige had been transferred to Chicago, which drew its supplies of white pine, the greatest staple of the American market, from Michigan, Wisconsin, and Minnesota. The great lumber industries which made Saginaw, Mich., famous all over the world reached their climax of production in 1882. Now the cut in Michigan has sunk from two and one half billion feet board measure in 1882 to less than one billion. Wisconsin reached its maximum cut in 1892 with over four billion feet, which has now come down to less than two and one half; while Minnesota's cut is still on the increase. These figures refer to white pine and show plainly that this our greatest staple is rapidly nearing the end of supplies. Then when this great source of wealth has ceased to flow, what remains of hardwoods in these great lumbering states will perhaps be more carefully handled.

The great hardwood market to-day is, however, at St. Louis, to which are tributary the magnificent hardwood forests of the Mississippi bottom and its affluents. Here the white and red oaks are kings of the market, as the white pine in Chicago, ash and hickory, sycamore and cottonwood—for this last species too has become an important material for boxes, etc.—and the long-despised, but lately highly appreciated red gum, or liquidambar, are supplying the furniture, carriage, cooperage, and other woodworking trades.

The southern pineries have not developed any one great center of distribution for their matchless ware of hard yellow pines, long-leaf and Cuban, which both go under the name of Georgia pine although they are found from North Carolina to Texas; short-leaf pine, which goes in the trade as North Carolina pine although it is as well developed in Missouri and Arkansas, and lob-lolly or Virginia pine, which accompanies the other two to Arkansas and Texas. Here, too, the bald cypress, most fine grained and durable of conifers, grows in the swamps, having its greatest development around New Orleans, where the Cypress Association controls the market. In the South we must seek the supplies of building material for the next century, at least the first half, for even here supplies are not inexhaustible and the naval store industry, followed usually by forest fires, assists in decimating them. From the West we have so far not drawn much. The distance forbids shipment by rail of the bulky material except for special purposes. But when the Nicaragua Canal shall have established a short water connection the magnificent giants of redwood—if any shall be left by that time—of the soft sugar pine and the hard yellow pine, and, best of all construction timbers, the Douglas spruce, in the trade called yellow or red fir, will be welcome substitutes for the kinds which we shall then find becoming scarce on the eastern side of the continent. We shall then also appreciate some kinds which now we despise, the magnificent hemlock of the Pacific coast and the giant larch of the interior basin, which now are mostly only destroyed by forest fires. Before another generation shall have passed, however, we shall have learned that we can and must get along with less lumber, build of iron and stone those structures which are better built of those materials, and reserve wood for those uses for which it is indispensable, namely where non-conductivity of heat and electricity are essential.

LORD DERBY.

BY T. RALEIGH, D. C. L.

THE Stanleys of Lancashire were originally a younger branch of the house of Audley; they took their family name from the manor of Stanlegh, and they have worn it with distinction for six hundred years and more. Thomas Lord Stanley was present at Bosworth Field in 1485; took an important but not glorious part in deciding the event of the day; and was rewarded for his prudence by a grant of the earldom of Derby. Henry, the fourth earl, sat on the trial of Mary Queen of Scots. James, the seventh earl, was among the sufferers for King Charles I.; and the defense of Lathom House by his countess is one of the best-known incidents of the civil war. When James II. tried to break down the Protestant establishment of the Church of England, the Stanleys threw in their lot with the Prince of Orange, and from that time forth they were reckoned as Whigs. Edward, the twelfth earl, was a keen politician and sportsman; it is from him that the famous annual race at Epsom takes its name. His son, the thirteenth earl, was devoted to the study of natural history.

Edward Geoffrey, eldest son of the thirteenth earl, was born in 1799. At Eton and Christ Church he worked well—so well that his Greek and Latin books were his favorite companions in later days. Like Charles Fox and John Russell, young Stanley was elected to the House of Commons before he was of age. He seemed at first to be in no hurry to distinguish himself; he read, and shot, and went racing with his grandfather; in the last year of Mr. Monroe's presidency he made a tour in the United States. His few speeches in Parliament marked him out as one of the rising members of his party; in the race of pro-

motion he was already running almost even with Melbourne, who was twenty years his senior. Both these future prime ministers held subordinate offices under Canning and Lord Goderich. Stanley declined to serve under the Duke of Wellington. He had made up his mind to a large measure of parliamentary reform; he did not approve of the duke's impracticable Toryism. When Lord Grey took office in 1830, Mr. Stanley became chief secretary for Ireland. The years which followed were the most brilliantly successful of his life. Lord Althorp, who then led the House of Commons, was not a good speaker; the Reform Bill was carried through many difficulties by the readiness and resource of the chief secretary. Stanley was indeed a born debater; his aquiline features and his ringing voice seemed to mark him out as a champion in the fight. When the bill was safely through, he left the Irish Office and became secretary of state for the colonies. During his tenure of this office he had the conduct of the bill by which slavery was abolished in the West Indian colonies of Great Britain.

"Stanley never fails," said one of his admirers. "Stanley, as usual, flippant, petulant, and fierce," said one of the bitterest of his critics. There is truth in both descriptions, but the "petulance" of his manner is partly accounted for when we remember that Stanley was beginning to find himself in a false position. On the question of parliamentary reform he had been in hearty agreement with the leaders of the Whig party; on other questions his sympathies were for the most part with the Tories. In 1833 Lord Althorp wished to deal with agitation in Ireland under the ordinary law; Stanley insisted on bringing in a stringent Peace Preservation Bill, and carried it in spite of the passive resistance of his colleagues. When the endowments of the Church of Ireland were under discussion, Stanley was prepared to support a measure of redistribution; but he thought it would be wrong to secularize any part of the property of the church. On the 6th of May, 1834, Lord John Russell made a speech in the House of Commons by which the government stood committed to a policy of partial secularization. "Johnny has upset the coach," said Stanley to his next neighbor. He resigned his office and severed his connection with the official Whigs. In this same eventful year, Mr. Stanley's grandfather died, his father became Earl of Derby, and he himself assumed the courtesy title of Lord Stanley.

The foremost champion of reform had ceased to be a Whig, but it was some time before he could be counted as a Tory. He had been brought up to believe that the Tories were the stupid party, and he was not yet convinced to the contrary. Also, there was a certain want of cordiality in the relations between himself and Sir Robert Peel. They were both Lancashire men; but Stanley belonged to the old nobility; his manners were frank, haughty, and careless; while Peel, on the other hand, belonged to the new aristocracy of capital; his manner, though he always meant to be courteous, was sometimes ungracious and sometimes a trifle pompous. Peel was a timid politician, but patient and persevering and fond of power; Stanley was a reckless politician, but he was easily discouraged, and his pride would not submit to the slavery of leadership. Peel gave all his serious thoughts to politics; Stanley often neglected politics because he was shooting, or racing, or translating Homer.

From the year 1838 onward, Lord Stanley allowed himself to be reckoned among Peel's followers, and when the Tories came into office in 1841 he returned to his old place at the Colonial Office. He was still a young man, but he was subject to fits of gout; the labor of attending the House of Commons was too much for him, and he must have been frequently chafed by the solemn dignity of his leader and rival. From this uncomfortable position a way of escape was opened to him by a curious rule of the English constitution. When one person possesses more than one barony or title of peerage, his eldest son, if of age, may be summoned to the House of Lords by the title of one of his father's baronies. Under this rule, Lord Stanley "of Bicker-

staffe" took his seat among the peers in 1844.

The years which followed were occupied mainly with debates on the question of free trade. Lord Stanley was prepared for free trade with the British colonies, but he resigned when Peel declared for the total abolition of the corn laws. He was a protectionist; first, because he thought it undesirable that the people of England should be dependent on foreign supplies; and second, because he thought that protection was necessary to the prosperity and the political influence of the landed aristocracy. He shared to the full the indignation of those conservative politicians who felt that Peel had betrayed them. As a member of the House of Lords, Stanley was not in a position to say all that was in his mind; but he enjoyed to the full the barbed epigrams with which Mr. Disraeli was harassing his former chief in the other House.

After the election of 1841, the Tory party came into power with a majority of ninety-one in the House of Commons. From 1846 onward the Tory party was divided into two irreconcilable sections. There were the Peelite free traders, who had gone so far in the Liberal direction that they could not find their way back. And there were the protectionists, beaten but not convinced, slowly forming themselves into a party under Lord Stanley, Lord George Bentinck, and Mr. Disraeli. So hopeless was the division that Lord John Russell, at the head of a rather weak Whig administration, was able to hold his own for five years and more. At last in February, 1851, the government was placed in a minority, and Lord Stanley was summoned to advise Her Majesty; but he could not take office without the Peelites, and the Peelites held obstinately aloof. In June of the same year, Lord Stanley's father died, and he became the fourteenth Earl of Derby. When Parliament met in 1852, the Whigs were still in difficulties, and Lord Derby was virtually compelled to form a Tory administration. His tenure of power was short and inglorious. In the first place, he disappointed his protectionist supporters by accepting the verdict of the country in favor of free trade in corn. In the second place, Disraeli was still unable to command the confidence of the House of Commons. In December, 1852, Mr. Gladstone avenged the shade of Peel by delivering a terrific attack on Disraeli's financial proposals; the Tory government fell, and Lord Aberdeen formed a strong coalition ministry of Whigs and Peelites.

Lord Derby was not greatly discouraged; he could still make his influence felt, though he was not in power; and he had many occupations "out of doors" to console him for his parliamentary defeat. The strong ministry of Lord Aberdeen blundered somehow into the Crimean War, and the conduct of a distant winter campaign revealed many defects, both military and administrative, for which the government was held responsible. Discontent rose to a height so rapidly that in January, 1855, Lord Aberdeen was already regarded as impossible, and Lord Derby was asked to take the helm. He declined the responsibility, and his biographers seem to be agreed in holding that this was one of the great mistakes of his life. If, they say, Lord Derby, had taken office, and had induced the queen to dissolve Parliament, he could have gone to the country with a moderate Conservative program, and with a promise that the war should be energetically prosecuted, and the people would have given him their support.

There is much to be said for this opinion, but we must remember that Lord Derby's personal position was one of considerable difficulty. The Tories distrusted him because he had been a Whig; the free traders of all parties still regarded him as an enemy; the "Irish brigade" had not forgotten how, in the days of his hot youth, he had defied O'Connell. No man questioned Lord Derby's honor, but there were few who expected him to show prudence or consistency if he were called again to the highest place in the state. He spoke his mind too freely; he was too clear-headed and too proud to conciliate people with whom he only half agreed. It is a circumstance worth noting that Lord

Derby's relations with the court were friendly, but not exactly cordial. The Prince Consort, a most accomplished, high-minded man, was imbued with German ideas of official propriety; he never quite understood the frank humor of Lord Derby, or the easy independence of Lord Palmerston.

In 1858 the party kaleidoscope was turned again, and Lord Derby became prime minister for the second time. His government was short-lived, but it passed some measures of great importance—the bill for removing the political disabilities of the Jews, and the bill by which the government of India was transferred from the East India Company to the crown, may be mentioned among others. Much to the satisfaction of the prime minister, his eldest son became the first secretary of state for India. Father and son were both distinguished in their day, but their characters were, in some points at least, curiously contrasted; for while the father was always outspoken, and sometimes headstrong, the son was always cold, reserved, and cautious.

The Reform Act of 1832 altered the balance of the English constitution; but there were still large classes of the population who possessed no parliamentary franchise. The question of further reform was not a party question; there were some Whigs who said, "Rest, and be thankful"; there were also some Tories who said, "Why not deal with the franchise on broad general lines? Why not make a bid for the confidence of the working man?" In 1859 Lord Derby's government brought in a moderate measure of reform, but they were courting disaster, for at that moment the House of Commons was not in earnest in this particular matter. The government was defeated; Lord Palmerston came in again, and held office until his death in 1865. Lord Derby, as leader of the opposition, gave little trouble; there was indeed a kind of friendly understanding between the prime minister and himself. In the issues which then divided parties their opinions were very much the same.

At the general election of 1865 Mr. Gladstone failed to secure reelection as member for Oxford University. The Tories were overjoyed; but they had, in fact, done a bad day's work for their own cause. So long as Mr. Gladstone represented Oxford, his liberalism was of an academic and somewhat conservative cast. On his defeat he went at once to Lancashire, and he went, as he said himself, "unmuzzled." There was a new note in his speeches, a new spirit in his politics; Mr. Gladstone had become a Democrat. Earl Russell, who succeeded Lord Palmerston as prime minister, had promised a reform bill, and he redeemed his promise in 1866; but he was now in the House of Lords, and the battle was to be fought elsewhere. Mr. Gladstone's speeches in the House of Commons made reform—a large measure of reform—inevitable. The bill for which he spoke was defeated; Lord Russell and his colleagues resigned; but when Lord Derby kissed hands as prime minister for the third time, he knew that his party could hardly survive unless he and Mr. Disraeli could settle the electoral suffrage of the future.

They settled it, for the time, by passing the Reform Act of 1867, which established household suffrage in all borough constituencies. (The same wide suffrage was extended to the counties in 1884.) Lord Derby, speaking in the House of Lords, described his own measure as a leap in the dark, and from this saying it has been inferred that household suffrage was Disraeli's idea, accepted by the prime minister under pressure of necessity. There are strong reasons for thinking that this inference was mistaken. Lord Derby was always a reformer; and he was just the man to say, "There must be an end to this tiresome dispute about £10 houses and £6 houses. Let us boldly propose to enfranchise all rate-paying householders." Lord Derby never went very deep into the philosophy of politics; his natural tendency was to form off-hand judgments; he was growing old, and his health was rapidly failing. In February, 1868, a prolonged attack of gout compelled him to retire, and his place was taken by Mr. Disraeli.

If the Tories counted on the gratitude of the newly enfranchised classes, they were rudely undeceived. The immediate result of household suffrage was to bring Mr. Gladstone into power, who very shortly disestablished the Protestant Church of Ireland. Against this measure Lord Derby delivered his last great speech. "My official life," he said, "is entirely closed; my natural life cannot now be long. That natural life commenced with the suppression of a formidable rebellion in Ireland, which immediately preceded the union between the two countries. May God grant that its close may not witness a renewal of the one and a dissolution of the other!"

Lord Derby died on the 23d of October, 1869. He was a fighter all his life, and he made some enemies; but he was best loved by those who knew him best.

CHEMISTRY AS A FACTOR IN MODERN CIVILIZATION.

BY L. H. BATCHELDER, A. M.

PROFESSOR OF PHYSICAL SCIENCE IN HAMLINE UNIVERSITY.

VIRCHOW once remarked in a conversation with a friend and pupil from America that "in his judgment, the world had not since had a greater man than Plato." In other words, he said history furnishes no evidence of an evolution in the mental capacity of those who, from century to century, have been distinguished for their superior intellectual endowments. Perhaps we need not question this conclusion, but it is only a truism to say that in the material for intellectual development and activity there has been a vast advance since Plato's time. The greatest material advances have been fairly crowded into the present century—advances which have contributed to the well-being and comfort of civilized peoples to a degree difficult for us, living at the century's end, to appreciate.

The scientific method, which begins by examining critically the facts, which collates these facts, and from them deduces conclusions which are in turn to serve as factors in further conclusions, has characterized and conditioned the progress of chemistry during all the century. This method has, as a result, pervaded all departments of intellectual life, and is shaping men's modes of thought and investigation, even along lines which have not heretofore been ready to yield themselves to its operation and results.

The study of chemistry has become an important factor in education, training the youth in mechanical dexterity, in accurate observation, in correct deduction, in clear and concise statement, and, perhaps most important of all, in the use of the imagination; so that chemistry now has a prominent place in the curriculum of all institutions of higher education, even though the end sought be the acquisition of intellectual power, and not merely technical skill.

During the last twenty-five years, Germany has been at the front in chemical pursuits. Probably during that time more important investigations have been carried to a successful conclusion in German laboratories than in those of all the world besides. Her devotion to pure chemistry has reacted to stimulate the pursuit of applied chemistry. Her public men have long regarded her technical schools as of the first importance and have fostered them with the greatest solicitude. The beneficial result of this is apparent in the phrase "made in Germany," which is now found on such a vast number of manufactured articles in daily use in nearly all the countries of the world. English manufacturers and publicists have already taken alarm, and are endeavoring to stimulate their countrymen to action in this direction; but a stern chase is proverbially a long chase. It would be wisdom for America to rely in the future not less on the inventive genius of the "Yankee," but more on the

"*eins, zwei, drei*" of the German drill, which characterizes not only Germany's military system but her educational system as well.

While the importance of chemical studies and chemical methods of thought in modern civilization is perhaps sufficiently obvious, yet it is in its contributions to the material well-being and comfort of mankind that modern chemistry is most conspicuous. Chemistry has, in many instances, by its researches and conclusions created wholly new and important industries. In many other instances, by introducing scientific methods, she has revolutionized ancient industries and developed them to mammoth proportions.

Chemistry entered the domain of agriculture in the person of Liebig, near the middle of this century, and reduced to a science a pursuit which had, for untold centuries, been an ignorant and wasteful use of nature's bounties; for Liebig first taught the agriculturist that, unless his soil was to become exhausted, he must restore to it definite amounts of phosphoric acid, potash salts, and nitrogen. European countries for half a century have been reaping the benefits of Liebig's pioneering work in the chemistry of plant-life. America with her broad domain of virgin lands has, till recent years, gone on too much in the old way, though in our older and less fertile regions, agriculturists are learning the valuable lessons which chemistry can teach them.

Chemistry came to the aid of physiology and by her most arduous labors the world has gained a knowledge of the chemistry of digestion, the constitution of the blood, the bones, and in part of the flesh and tissues, while hygiene has found in chemistry the most powerful of all aids to her development. Chemistry, always the handmaid of medicine, has in modern times, among other contributions, given her anesthetics, thus robbing the surgeon's knife of its ancient terrors, has furnished her with a specific for malaria in quinine extracted from cinchona bark, and has more recently prepared a long series of the most valuable febrifuges, including phenacetin and antipyrine.

Chemistry is invaluable to the pathologist in his investigations into the cause and products of putrefaction. By its aid he makes delicate tests for the recognition and distinction of bacteria, and thus it has been instrumental in helping to found the new science, bacteriology. Chemistry directed the attention of physicians to remedies for counteracting the pathological processes produced by micro-organisms. Lister's discovery in 1872 has revolutionized surgery; indeed it has created modern surgery. To such perfection has Lord Lister's antiseptic treatment of operation wounds been carried that the surgeon now performs his operations with confidence in the results—operations, the simplest of which were formerly liable to prove fatal, and many of which, twenty-five years ago, were not dreamed of as possible.

In the paper of last month we saw how the manufacture of coal-tar colors, now such an important industry, is the outgrowth of a clear understanding of the chemistry of benzene and its derivatives. Artificial substitutes for most of the perfumes and flavoring extracts are now manufactured in the laboratory, though the dietitian regards the latter with some disfavor.

The chemist taught the French and Germans how to extract pure sugar from the ill-smelling and ill-tasting, but saccharine, juice of the beet root, and an industry grew up rivaling in magnitude that of the manufacture of sugar from the cane itself. He even manufactures from coal-tar a saccharine substance, though not a food, which has three hundred times the sweetening power of cane sugar.

With the exception of gunpowder, an empirical product of ancient origin, all the explosives are products of the chemist's laboratory. The discovery of guncotton (1846) marks the beginning of the era of the modern high explosives. Cellulose, a carbohydrate, is something like an alcohol in that it will form salts with the acids; with nitric acid it forms nitro-cellulose or guncotton. A form of this is the essential part of the modern smokeless powder, so

much talked about in this country since the experience of our army in Cuba, though it was already familiar to the war departments of European governments. Nitro-glycerin, in its various forms, such as dynamite, now plays an important rôle in railroad and canal building and similar peaceful enterprises. As its name indicates, nitro-glycerin is a salt of the basic glycerin, which, it will be remembered, is an alcohol, here united with nitric acid.

The manufacture of iron, more ancient than history, has, within this half century, been revolutionized by the technical chemist, assisted, in this case, as he frequently is, by the devices of the machinist. The "Bessemer process" for the production of steel (1856) was the result of a clear perception of the chemical relation between iron and steel. As a direct result of this process, ours has become an "age of steel." The "Thomas-Gilchrist process" for dephosphorizing iron (1879), which has been such an immediate and startling success in utilizing for steel-making the abundant and cheap supply of phosphoric iron, is another of the many recent triumphs of the technical chemist. If we reflect that steel, when first made in this country, was worth $186 per gross ton, and that manufactured steel, in the form of rails, has been quoted within recent months as low as $18 per ton, and even less, we shall get a glimpse of the tremendous economic importance of these discoveries. Among the many effects of this cheapening of steel is the revolution which it is rapidly working in architecture and ship-building.

Chemistry found the world threatened with a paper famine. She set herself to produce a substitute for the rags which were the paper manufacturer's staple material, and which, strangely enough, in this poor world, were becoming increasingly scarce, while the manufacturer's demand steadily advanced. After years of trial, many failures and some successes, sulphite cellulose, or wood-pulp, as it is called, is now furnished to the paper-maker at astonishingly low prices, in unlimited quantities, and so excellently meeting his requirements that the ancient commerce in rags is rapidly disappearing. The wonderful cheapening of printed matter and the increased dissemination of newspapers and literature—good and bad—is largely attributable to "wood-pulp."

Chemistry applied herself to the utilization of the constituents of crude petroleum; a vast and complex industry sprang up, pouring wealth into the coffers of the few, but contributing to the comfort, convenience, and economy of living of the million.

The invention of matches, the chemistry of fermentation, the vulcanization of India-rubber, with the resulting great and useful variety of "rubber goods" and the modern "Harveyized" steel armor-plate, the last two American discoveries, must be passed over with this mere mention, while still others must be passed without mention.

Any account of the influence of technical chemistry in developing the material features of modern civilization, however brief and incomplete, must not fail particularly to notice certain industries of fundamental importance, because inseparably connected with the manufacture of nearly all the products which civilized peoples now regard as essentials of daily life—the manufacture of sulphuric acid, of sodium and potassium carbonates, and hydrates and their by-products.

Sulphuric acid is used daily in every chemical laboratory, in every chemical factory, and in many other of the most important branches of manufacturing industry. It is true, as has been said, that we may take the amount of this acid consumed by a nation as a measure of the development of its civilization. Sulphuric acid has long been known; Geber, a celebrated physician of the eighth century, certainly prepared it by distilling alum, though little was known of its properties till centuries later. It was first manufactured on a considerable scale about the middle of the last century, but the elaboration of the present process was the work of this century; even within a very few years, important improvements have been made, as a result of extensive chemical researches.

Sulphuric acid occurs in nature in the form

of salts, or sulphates, such as alum and calcium sulphate, or gypsum. The replacement of the calcium in gypsum by hydrogen, so as to obtain the acid, suggests itself; but this cannot be readily made, for there is no available acid less volatile than sulphuric acid, and therefore capable of replacing that acid in its salts. Hydrochloric acid and nitric acid are made by treating their salts with sulphuric acid, since it is less volatile than those acids and, therefore, able to replace them when the mixture is heated till they are volatilized and distil over into a receiver. Sulphuric acid is built up from its elements. The process is based on two facts: (1) when sulphur is burned it forms sulphur dioxide, SO_2; (2) when the dioxide is treated with a proper oxidizing agent, in the presence of water, it is converted into sulphuric acid, H_2SO_4. The chief difficulty is in the second stage of the process. This step is now accomplished by leading the sulphur dioxide into leaden chambers together with steam, oxygen of the air, and oxides of nitrogen contained in nitric acid.

Here a very complex series of reactions ensue, which have been the subject of the most elaborate researches, resulting, as has been said, in perfecting the process of manufacture. Formerly, the sulphur burned in making the acid was obtained as free sulphur from the volcanic island of Sicily; but now, in many factories, owing to its increased cost, iron pyrites, which are sulphides of iron containing about forty-eight per cent of sulphur, are roasted with free access of air, when the sulphur is given off, oxidized, and led into the chambers. The iron is also oxidized and is utilized as a by-product. The nitric acid required is made on the spot by treating sodium nitrate—a natural product from Chile—with sulphuric acid. The nitric oxides derived from this acid in the leaden chambers are continuously regenerated by the oxygen, so that only a very small per cent is required to serve as a carrier of the free oxygen into combination with the dioxide and water; thus the cost of the materials which enter into sulphuric acid is exceedingly small. The apparatus now employed in making this acid is on a huge scale. The leaden chambers, for example, of which there are three in each plant, frequently have a capacity of five thousand cubic feet each. The quantity of this acid manufactured in 1897 in England, Germany, and the United States—the principal producers—is estimated at six billions of pounds, worth about one cent per pound. At the beginning of the eighteenth century, it was worth three dollars and twenty-five cents a pound.

Potassium carbonate is found in the ashes of land-plants, and may be obtained by leaching the ashes with water and evaporating the lye, as it is called. In the same way sodium carbonate is found in the ashes of marine plants. Until about seventy-five years ago such were the principal sources of these valuable salts. Potassium carbonate was extracted in this way from wood ashes, by the early settlers of the states along the Atlantic coast, to whom its export was for many years a source of considerable revenue and of vital importance in their struggle with the giant forests which clothed all that region. Under these conditions the supply of potassium carbonate was much more abundant than that of sodium carbonate. Chemists already understood that nature furnishes an unlimited supply of sodium in sodium chloride, or common salt. As there was a great demand for these carbonates, a prize was offered by the French government for a method of making soda from common salt. Le Blanc, a French chemist, finally solved the problem and took out a patent for his process in 1791. Somewhat later, the constant wars of the Republic, by preventing the transport of goods by sea, caused potashes to become very scarce in France. By a decree of the Council of Public Safety, Le Blanc was obliged to surrender his patent and factory to the Republic. This great benefactor of his kind died a few years later in poverty and despair. After the war was ended the process, though not forgotten, dragged along without much effect, until it was taken up and developed by some English manufacturers. The industry had

assumed considerable proportions by 1824. This method of Le Blanc's is in use till this day, and is in brief as follows:

(1) Sodium chloride + sulphuric acid = sodium sulphate + hydrochloric acid.

(2) The sodium sulphate + coal + limestone, heated together = sodium carbonate + calcium sulphide + carbon dioxide.

Calcium sulphide is insoluble in water; so that by treating the resulting mass with water the sodium carbonate is separated from the sulphide. While comparatively simple in outline, the process is in reality very complicated. A vast amount of labor and money has been spent on its perfection, and on methods of utilizing the waste products, which now form an important part of the output of every soda factory.

The first by-product, hydrochloric acid, of which great quantities are produced, is, in part, purified and put on the market in an aqueous solution, containing about thirty-two per cent of the acid. This finds a large application in the arts. The other portion is decomposed by acting on it with manganese dioxide. The free chlorine thus obtained is run into lime, with which it unites, forming chloride of lime, so much used as a disinfectant, but more largely in factories for bleaching purposes; hence the name, "bleaching-powder." The manganese dioxide used in freeing the chlorine is recovered and used over and over. The mother-liquor, from which the crystals of the carbonate have been separated, owing to secondary chemical changes, contains a considerable amount of sodium hydrate, or soda-lye. This is recovered, sufficiently purified, and used in soap-making. Sodium hydrate is also readily made from the carbonate by reacting on its solution with lime.

For a long time, a much simpler process for manufacturing sodium carbonate had been known, but there were difficulties, chiefly mechanical, in the way of its employment, which Solvay, in about 1880, succeeded in overcoming. Since that time, the Solvay process has been more and more employed, until now much more than half of the soda produced is made by this method. In this process ammonia water—a by-product from the gas and coke works—is treated with carbon dioxide, obtained by heating limestone, giving a soluble salt, bicarbonate of ammonia. Then:

Bicarbonate of ammonia + sodium chloride = bicarbonate of sodium + ammonium chloride.

The bicarbonate is difficultly soluble and crystallizes out, leaving ammonium chloride in solution. On gently heating the bicarbonate, it is changed into the desired carbonate, giving off carbon dioxide. The ammonium chloride is not allowed to go to waste but is heated with magnesia, and the ammonia set free to be used again; the magnesium chloride resulting, on being heated with water, gives hydrochloric acid. The quantity of the carbonates, as well as of sulphuric acid, manufactured in this country is rapidly increasing; indeed, the time seems not far distant when, from being a heavy importer of these important commodities, the United States will become an equally heavy exporter. The world's product, last year, of carbonates and hydrates, reduced to the basis of pure carbonates, was probably one and three fourths billions of pounds.

Hand in hand with the development of the soda industry has gone on the expansion of other branches of chemical manufacture. Prominent among these should be mentioned the soap industry. The fact that fats are ethereal salts, formed by the union of glycerin with various fatty acids, first taught by the great chemist Chevreul, not only enabled the soap manufacturer to improve greatly his methods and products, but may be said to have created the manufacture of stearin candles and glycerin.

Though by purely empirical methods, the manufacture of glass, porcelain, and earthenware had reached a high state of perfection; yet these industries have, in recent times, been greatly benefited by a better knowledge of their chemistry.

This short sketch only serves to indicate how great have been the contributions of applied chemistry to modern civilization. Nowhere can there be found, as Von Meyer remarks, a better illustration of Bacon's maxim, "*Scientia est potentia.*"

THE TESTIMONY OF HUMAN EXPERIENCE.

We have heard him ourselves, and know that this is indeed the Christ, the Savior of the world.
—John iv. 48.

CHRIST and Christianity are here and they must be dealt with. We meet them in the nineteenth century, just as the people of our text, the Samaritans of the city of Sychar, met them in the first century. Indeed the great things in both centuries are the same things. The first century was the sunrise of history, all before was only starlight, in the opening streaks of dawn; the nineteenth century is the noontide of history, and Christ and Pentecost and the New Testament, the things that rose in the first century, have made it so.

Christ and Christianity are here to be dealt with, that is our point. They are more here with us than they were yonder with the Samaritans. Christianity is greater now than it was then. We have now the success of Christianity. It is now a great kingdom with predominant power in the world. It is now a great fellowship which embraces many crowded centuries. It was never so much in the world as it is now.

What I wish to impress is the nineteenth century fulness of Christ and Christianity. There is enough in Christ and Christianity as we have them to challenge the best thought of all men. Their very claims and aims challenge attention and receive it. If they professed less, claimed less, they would be passed without notice. They claim the power to regenerate the world and to transfigure humanity. The vastness and fearlessness of their claim is in their favor. They secure investigation, and investigation which is thorough means acceptance.

This is what men like. What? An open, straightforward, unequivocal claim, and the opportunity to test it. Never was there an age in which there was so much testing of Christ and Christianity. Our age is asking all the questions of the prior ages over again, and it is adding questions of its own. Men never wanted truth more than they want it to-day. There is a universal search for truth. Men are searching for it in every field. Men never wanted truth on the line of the Christ more than they want it to-day. Men were never so particular about Christian evidence. And all this is resulting in a firmer and better establishment of Christianity, and in the purification of Christianity. It is a grand thing when history and science and philosophy and common sense come together to demonstrate the truth. Do you know the extent to which investigation is going forward to-day for the confirmation of Christianity? Do you realize the fresh arguments which are being brought forward in our century by means of this untiring investigation? Let me stop here to illustrate and give sample facts.

There is Henry Drummond, the scientist, corroborating Christian doctrines, paralleling the spiritual life by the processes of life in nature, showing the reign of the one God with his one law in nature and in Christianity. The doctrine of regeneration is a fundamental doctrine of Christianity. Christ himself preached it. But men have jeered at this doctrine. It has been a stumbling-block. It puzzled Nicodemus when Christ first uttered it. Drummond enters nature and shows that nature teaches the doctrine of regeneration. In nature, life only comes from the touch of life. He finds that nature preaches the very same doctrine and shows Christendom that the doctrine of regeneration is not unscientific. He confirms the Christian religion in one of its cardinal truths. Thus science is at work for Christianity.

But science is not alone in building up the confirmation of our religion; history is active also in the same work.

There is Kurtz, the historian, gathering together the great deeds of Christianity and telling the triumphs it has achieved and the

reforms which it has inaugurated and carried to success. He shows us that Christianity needs no argument save its own authentic history. All that Christianity needs is to have told what it has endured and what it has done. The witness of history is conclusive. Christianity is the author of the world's best civilization. It is the mother of universities. It is the author of reforms. It is the leading factor of human progress. It has raised the estimate of human life. It has fought down the degradation of women. It has struck at every form of human slavery. It has annihilated many forms of false philosophy. It has been the uncompromising foe of every corrupt institution in church and state. Judging by the past, the historian tells us that when Christianity has worked out its ideals there will be on this earth of ours only liberty and virtue, and brotherhood, and righteousness, and love, and the enthroned Christ. A religion that can work such works is its own excuse for being.

There is still another way of confirming Christianity; it is known by the name, "Comparative Theology." It is a modern method. It is this: Other religions are thoroughly studied and are credited for all that is good in them, and then Christianity is put side by side with them, and its excellencies are brought out by way of contrast.

Sir Edwin Arnold, the poet, has been at work on this line, and he has done effective work. He first wrote his book "The Light of Asia." This book is an excessive adulation of Buddha and Buddhism. He has written another book, "The Light of the World," in which he enthusiastically exalts Christ and Christianity by putting them at the head. According to this poem, "The Light of the World," Christianity is superior to Buddhism in four things. First, its ethical teachings are plain and practical. They are summed up in the Golden Rule. Second, it is a religion of intense joyousness. Third, it teaches the fact of a personal God whose nature is love. Fourth, it is supreme for its social character.

It is thrilling to look upon these different methods whereby Christianity is confirmed. The argument in defense of the Christian religion is cumulative, and the summation of the cumulative arguments is irresistible. What other religion has such a mass of evidence in its favor, historic, scientific, comparative, prophetic, doctrinal, and moral?

But we are not through yet with the arguments in favor of Christianity and Christ. We have only reached the argument suggested by our topic. It is different from every argument which we have considered. It is more reachable than these, and, if anything, more conclusive. It is the argument of consciousness. It is the argument evolved from human life. Christianity is in the great book, the Bible, which has come down the ages, and it is also in the collateral books of history and material nature which bear testimony to and which support the truth of the Bible. But Christianity is also in human life, in the experience of those who have believed it and lived it and have found it to be true. It has come down the ages, not only in the Bible but in the lives of the saints, and in the godly succession, from Christ's day to this day. Now what does human life testify relative to Christ and the Christian religion? This, they fit human life exactly. The gifts and revelations of Christ and Christianity match the needs of man. Therefore the God who made man sent the Christ and prepared the Christian religion. Therefore man needs Christ and his religion; therefore man should live in perpetual union with Christ and should unalterably accept the religion of Christ. All this is of the nature of things. These conclusions are what we call self-evident things, and upon self-evident things we intuitively and spontaneously and irresistibly put the stamp of our approval. Self-evident things are direct and immediate revelations from God, and are universal. When we are consistent we cannot help surrendering ourselves to them. The fitness of Christ to my need is self-evident. Am I bound to surrender to the self-evident? Then I am bound to surrender to Christ, and am bound to apply Christ to my needs, and to allow his truths to lead my intuitions and to feed my better self.

I mean to press this argument of adaptation, for it is a tremendous power. It leads to the right conclusion. We admit its power in mechanics. Here is a lock with many wards and with curious intricacies, and here is a key, unlike other keys, and with singular peculiarities. Experience shows that there is a correspondence between lock and key, for the one exactly fits and easily opens the other. Now the nature of things demands that the lock shall accept of the key, and that the key shall accept of the lock, and use each other; otherwise they will both be useless and miss their mission in life.

We admit the power of adaptation in the works of God in nature. Adaptation is the one thing that shines conspicuously in God's works. Everything God does is wonderfully adapted to its purpose. If God puts a backbone into a man—and a backbone is something every man needs—that backbone fits man and man uses it. If the Christian religion be adapted to us, the argument of adaptation requires us for consistency's sake to admire it, to prize it, and to accept it and to use it.

My fellow men, Jesus Christ is not a contradiction of our nature. Neither is the religion of Jesus Christ a contradiction of our nature. I tell you that there is a parallel between the writing of God in man and the writing of God in what we call Christianity. We may think there is a contradiction, but there is not. My fellow men, Jesus Christ is never a contradiction of our nature. When therefore you reject him you reject the parallel of your best possible self.

Let us look at the completeness with which Christ meets our deepest personal need, and our loftiest aspiration, and thus reach the full benefit of the argument in favor of Christ which is embodied in the testimony of human consciousness.

Let us note four things:

1. In the first place I have a deep need of God implanted in the depths of my being; my soul crieth out for the living God. Does Christ answer that need? Does he bring God to me, and is the God he brings a God that satisfies my soul?

I stop not to argue man's need of God. That is an intuition. Every man has a sense of his need of God. I only stop to illustrate that need.

Man's need of God is like the earth's need of the sun. This earth of ours, ready to break forth into its full spring beauty of green leaf and pink blossom and burning flower — what would it be without the sun? It would be a poor opaque ball without light, a dried-up cinder, without heat, without color, without any glory of spring. Such a lifeless, cinder-like thing would man be without God. Christ brings God to me and puts me into living relations with him, and that means the spring-tide in every faculty of mine. God comes out of his hiding-place and manifests himself to me in Christ. Christ shows me his wonderful condescension, and reveals to me his infinite love. He tells me that I am a son and that God is my Father.

The God revealed by Jesus Christ satisfies me completely.

2. In the second place I have a longing to be something better than I am; does Christ show me what I may be and tell me how to reach what I may be?

It is precisely here that Christ fits me. He brings to me the highest possible views of man. He tells every man that He is the Son of God. Christ was swayed by a perfect enthusiasm for humanity. He taught that man with all his errors is a wonderful being; endowed with incomprehensible grandeur worthy of his own incessant vigilance and care, and worthy to be visited with infinite love from heaven. He magnified man and taught his apostles to do the same. Whoever cheapens man belittles his cross and makes his crucifixion a waste. Man's worth explains redemption.

When I ask him, what may I be? he points me to himself, and says, "You may be like me." And what would you change in Christ? He is the ideal man of history, and his is the unique and superlative manhood. He reveals man at his climax.

When I ask him how I may become like him, he replies, "Let me into your life. I made John, I made Paul; I took the fisher-

men of Galilee and transformed them into the teachers of the ages." And he did. These men let Jesus and his words abide in them, and that explains it all. He brought into them a hope which thrilled every fiber of their being with electric life. His words brought them into the association of grand ideas, and grand ideas gave breadth to their intellects, and their wills, and their hearts. What he did for the apostles he can do for others. Take a man to-day whose conversion reaches to the roots of his soul, and who has in very deed irrevocably entered the Christian life, and it is wonderful how like Christ he becomes.

3. In the third place, I have a conscience which prescribes duty; which determines principles for life. Does Christ harmonize with my conscience and satisfy it?

If so, then Christ has in his favor the testimony of my moral nature. The self-evident thing is this, he does appeal to my consciousness of duty, and to my power of choice, and he sets before me things to choose, and to approve, which are absolutely perfect. He does more than realize my highest conceptions of moral perfection. He actually takes my highest conceptions themselves and exalts and purifies them.

4. In the fourth place, I meet with trying experiences in life. Can Christ answer my need in these, can he teach me how to think, can he console and support me?

It is just here that Christ excels. Take the sorrows of bereavement. Who has uttered words for the death-hour comparable with the words of Jesus? Who has brought life and immortality to light as he has? Whose words are put upon our tombstones as his words are? What can bring to man such comfort as his resurrection brings?

My fellow man, allow me in closing to urge upon you a candid consideration of Jesus Christ. He is here, and he must be dealt with. Is he not here in great enough power and fulness to challenge your attention? How could he be more in the world than he is? He is so here, in our nineteenth century life and civilization, that you cannot escape him. You must either accept him or else thrust him to one side. The voice of Christ is sounding all around us and everywhere.

Listen to-day to the testimony of human consciousness. Behold what he can do for you. He is able to fit every faculty of your wonderful nature. His gospel is a needed gift to your imagination; a needed gift to your reason; a needed gift even to your senses, and is able fully to satisfy these. Know Christ. Become acquainted with Christ. When you truly know Christ, the result will be a total, affectionate, irreversible self-surrender to Christ.

A total, affectionate, irreversible self-surrender to Christ will mean harmony with self, the development and perfection of your better nature, the complete satisfaction of your whole being in time and in eternity, and a grandeur of personality which will match the grandeur found in the personality of Christ. The result will be that you will have a share in Christ's future, and in Christ's joy, and Christ's glory.—*Rev. David Gregg, D.D., in "Facts that Call for Faith."*

THE ENGLISH POOR LAW AND ENGLISH CHARITIES.

BY C. H. D'E. LEPPINGTON.

EVER since the year 1601, when Queen Elizabeth's last Parliament enacted that the churchwardens and overseers in each parish should make provision for setting the able-bodied poor to work and for providing for the impotent, and authorized them to levy from their fellow parishioners the funds necessary for those purposes, the principle that it is the duty of the state to make provision for its destitute citizens has met with practical recognition in England, although the mode in which it has been applied has undergone some serious changes. A notable departure

was taken during England's struggle for existence against Napoleon I. The high price for corn, which had risen between 1792 and 1801 from $10.50 per quarter to nearly $30, coupled with other causes, had reduced the laboring classes to the greatest straits. Parliament therefore enacted in 1796 that relief should be given to the able-bodied poor in their own homes, proportioned in amount to the size of their families, instead of maintaining them as heretofore in workhouses. This relief was given sometimes in money, sometimes in food and clothing, and very often in free house accommodation. In many cases the parish either employed the pauper laborers itself or else obliged the individual rate-payers to find work for them at a specified rate of wages. Such laborers were neither employed because their services were required, nor paid according to the market value of those services. The authorities unwittingly acted upon the famous maxim enunciated half a century later by Louis Blanc: "Work according to abilities; wage according to necessities."

In process of time, the burden upon the rate-payers and the demoralization of the laborers resulting from this system became so intolerable that Parliament issued a commission of inquiry which reported upon the abuses it had discovered in 1832. The commissioners also drew up certain recommendations for reforming these abuses, the chief of which, based on the principle that the position of the pauper ought not to be rendered more desirable than that of the well-conducted laborer, were that not merely poverty, but actual destitution, should alone give a claim to relief, and that all relief to able-bodied persons or to their families should be given in workhouses. English workhouses, it should be explained, correspond more nearly to the almshouses of the Northern Atlantic States than to any other American institution. The latter recommendation practically meant that, except in cases of sickness or old age, his home must be broken up before a man could obtain relief. Notwithstanding strong opposition, these recommendations were, in principle, adopted in the Poor Law Act passed in 1834, which created the present system, and they are, subject to certain somewhat wide exceptions, in force at the present time.

The parish is the administrative unit of relief under the Poor Law. England and Wales are mapped out into 648 parishes and unions of parishes, the residents in which periodically elect a body styled the Board of Guardians of the Poor. Women are eligible both to vote for and to become guardians. The functions of these boards embrace (among many other things) the erection and management of workhouses, of infirmaries for the pauper sick, of schools for pauper children, and of casual wards for tramps, and the granting and distribution of relief in the applicants' own houses subject to the restrictions laid down in parliamentary enactments, and also to the regulations from time to time issued by the Local Government Board. The latter is an extremely important department of the central administration. It is presided over by a member of the ministry for the time being in office, but its secretary and the rest of its staff are permanent officials of the civil service. It has fixed the duties of the officers of the Boards of Guardians, none of whom can be appointed or removed without its sanction, and it issues from time to time general instructions which should regulate the procedure of the guardians, even to fixing the dietaries in the workhouses. It has inspectors who attend the meetings of the guardians to give advice and report on the proceedings and who visit the institutions belonging to them, and also auditors to check their accounts. But it does not interfere with the discretion of the guardians in dealing with individual cases of relief.

With regard to this branch of their work, the guardians are entirely at liberty to refuse outdoor relief and to offer admission into the workhouse instead, although, as we have seen, they are not free to give out relief in all cases. It is very usual to offer a man the workhouse in order to test the reality of his destitution. Although any person may apply for relief, and although if

he be destitute it is the duty of the guardians to give it, yet, if they refuse it, the destitute person has, it is believed, no claim against them enforcible at law. On the other hand, a workhouse inmate can leave whenever he likes upon giving a day or two's notice, but he must take his family with him. In large English towns there is quite a considerable number of "ins and outs" of both sexes, who go into the workhouse for the winter and come out again for the summer. Consequently, the hapless children of these ne'er-do-weels are dragged away from school whenever their parents think fit to leave the workhouse, with, of course, disastrous results to the children's character. It should, however, be added that children who are being brought up in criminal or immoral surroundings may be sent by a magistrate's order to one of the industrial schools referred to further on.

The general tendency of poor law administration is, as far as possible, toward leaving the able-bodied adult paupers in the workhouse, where a certain modicum of food and cleanliness is insured to them, but where the treatment and surroundings should be deterrent without being absolutely punitive, and toward having separate buildings for the sick and for children. Orphans and deserted children are boarded out in working-class families under the supervision of local committees and of an inspectress from the Local Government Board. The old have separate quarters within the workhouse with some slight indulgences, and married couples who have reached the age of sixty are entitled to live together—a privilege not very frequently claimed. The grandparents, parents, and children of a pauper may all be compelled to contribute to the cost of his maintenance. Pauper labor is never let out to contractors and the industrial output of the workhouses which is put upon the open market is insignificant.

Of late, the proportion of pauperism to population in England and Wales has been about one thirty-seventh, at an annual charge to the public of about $50,000,000, or $1.62 per head of the population. The poor law of Scotland differs from that of England in several very important particulars, and it does not, in theory at least, recognize any claim to relief on the part of the able-bodied. The Irish system resembles the English, but is somewhat less stringent. The Hebrew community in England has a very complete organization for maintaining its own poor, known as the Jewish Board of Guardians, but entirely voluntary, and independent of the parochial machinery above described.

For lunatics, and persons suffering from infectious diseases (of whose cases the public health authorities have to be notified), asylums and special isolation hospitals are erected and maintained out of the rates,* and are managed by public bodies, such as guardians and the town and county councils, under powers conferred on them by Parliament. There are also charitable and private institutions for lunatics, but all are under the supervision of the Commissioners in Lunacy, a department of the permanent civil service composed of legal and medical specialists, to whom every inmate of an establishment for lunatics has a right to appeal. There are known to be about 107,000 persons in this unfortunate condition. More provision for the medical treatment of incipient lunacy without putting the patient under legal restraint is a great desideratum. All prisons are managed by the Prison's Commission, another branch of the civil service, and they are also subject to the inspection of the committees formed of the local magistrates.

We now pass from the survey of official relief agencies to that of agencies organized and carried on by voluntary associations and by private individuals. Some of them, although under voluntary management, are subject to the official inspection of one or other government department. These are the reformatory schools, to which young criminals between ten and sixteen are sent, instead of or in addition to prison, the industrial schools already referred to, and certain seaside convalescent and other homes of which the guardians of the poor avail themselves. Both reformatory and

*The rates are the taxes levied by town councils and other local authorities for purely local purposes.

industrial schools impart to the inmates elementary education and industrial training. A child sent to an industrial school may be placed with his relations during the latter part of the sentence, but he is still under the surveillance of the authorities of the school. The officers of the better managed institutions of this description keep in touch with the boys and girls after they have started in life. Attempts have been made to estimate the percentage of former inmates who "do well" in after life, but, as the expression is an elastic one which each institution can interpret in its own way, statistics on the point can have but little value. The parents are compelled to contribute as far as possible.

Another department of charity consists in looking after those who are thrown upon their own resources after having been inmates of an institution. There are Discharged Prisoners' Aid Societies not only in London and the large towns but in most places where there is a prison, and they unite in having a central committee. There is a society, entitled the Metropolitan Association for Befriending Young Servants, whose especial object it is to take girls by the hand as they leave the poor law schools of the metropolis, to find situations for them, and afterward to visit and keep an eye on them. There is a working arrangement between the guardians and the society for this purpose. A similar society is being started to look after boys. A third looks after young single women who go into the workhouse infirmaries for their confinement.

There is also an association for the after care of the insane, which takes up patients as they are discharged from the asylums, and aids them with convalescent treatment, and by obtaining them employment. Homes for lads and young women in employment or seeking situations are numerous, some taking rough and semi-criminal boys, and others errand lads and shop and factory girls. Most of them make some charge to the inmates themselves, such as from sixty cents to a dollar for lodging and $1.08 for board per week. Training homes for servants are abundant. There are several societies for procuring employment for ladies in reduced circumstances, for women generally, and for sailors and soldiers. The Salvation Army and the Church Army and one or two other societies have farm-colonies for training the unemployed in agriculture, and a great deal is done in promoting emigration to our own colonies.

Many of the forms of charity hitherto enumerated are of quite recent growth, the need for them having been only lately recognized. But the sad lot of those who are handicapped in the struggle of life by physical defect or infirmity—old age, sickness, blindness, etc.—has invoked practical sympathy for centuries, and our older endowed charities are usually either hospitals, almshouses, or doles to the aged in money or in kind. These are to be found in all parts of the country, but are most numerous in our ancient cathedral cities and county towns.

Some of these ancient endowments—more especially those for poor scholars—only require modification in matters of detail to make them useful institutions at the present day. Others have been fettered by such capricious limitations as never, probably, to have served any beneficial end, while others again, useful perhaps when originally founded, have been rendered by changed conditions either injurious or actually impossible to be carried out. The numerous bequests for ransoming Christians enslaved by the Turks and Moors offer an instance of the latter sort. Frequently the trustees of the endowments appropriated the funds wholly or in part to their personal use. What else, indeed, could they do, when, for example, the rental of land charged with providing ten poor persons with $5 apiece every Christmas had risen to $500? After more or less ineffectual efforts had been made to utilize the machinery of the Court of Chancery for the reform of the abuses which had become notorious in the management of endowed charities, Parliament created in 1853 a body styled the Charity Commissioners. To this board all trustees of endowed charities have to furnish an annual account of receipts and expenditures and of

sums due to the charities. The board has power to remodel such charities in respect both to objects and management, subject to the somewhat unfortunate limitation that the consent of the trustees as a body is necessary if the yearly income of the charity exceeds $250. The following example illustrates the way the commission works. Coventry, a very ancient town and now a great center of the bicycle industry, contains a population of less than 9,000 householders. An ancient endowment allotted 800 doles of $2.50 each, and two hundred and fifty doles of $20 to be annually distributed, but so as that a $20 dole should not go twice to the same recipient within fifteen years. Consequently nearly half the householders in Coventry must during that period receive $20 each in charity (to say nothing of the recipients of the smaller doles). The attention of the Charity Commissioners has recently been called to this pauperizing endowment, with the result that it has been transformed into old age pensions of $1.50 a week.

Omitting societies for the furtherance of religion and education, benevolent effort, until the middle of the present century, usually took the form of establishing almshouses, hospitals, and orphanages, and of bequeathing funds for the distribution of doles of food and money to the poor. In London alone, thirty-one hospitals, twenty almshouses, and twenty-three orphanages, all founded between the years 1700 and 1850, are in use at the present moment. A considerable number are limited to disabled or impoverished members of particular callings, and their children, such as the tailors' almshouses and the police orphanage. Some of these are really provident institutions, since they give the preference to persons who have subscribed to their funds while able to do so. The newer forms assumed by philanthropy are those of provident dispensaries, convalescent houses, nursing associations for attending the sick poor in their own homes, homes for incurables, children's country holiday funds and holiday camps, clubs for lads and young women, associations like the Young Men's Christian Association and the Girls' Friendly Society, which aim at superintending the mental, and especially the moral development of the adolescent of both sexes, societies like the Prisoners' Aid Societies already referred to, which supplement the operations of state institutions, and societies for enforcing the laws for the protection of women, children, and animals.

University and other settlements in poor districts can scarcely, perhaps, be classed as charities in the technical sense of the term. It should be added that the French, German, Italian, and some other foreign colonies in London have societies for assisting compatriots in distress, and each of the three first has its own national hospital.

Lastly, there is the charity organization system, dating from the foundation of the London society in 1869. This is by far the largest and most influential of the British societies, though there are sixty-six others scattered over England and Scotland, most of them being affiliated to the senior body. It has thirty-nine local committees, whose operations cover almost the whole of the metropolitan poor law area, and a central council, composed partly of representatives chosen by the local committees and partly of cooperated members representing other philanthropic undertakings. The general inquiry and relief work, as well as that of coordinating charitable effort of every description within their districts, devolves upon the local committees. The council and its staff have three leading functions: to supervise the local committees and their work; to expose impostors and fraudulent charities; and to endeavor, directly or indirectly, to introduce sounder principles and improved methods of administration (including cooperation upon a mutual understanding) among our very heterogeneous mass of philanthropic undertakings, and at the same time to mold general opinion into support of its aims and principles, and thus to guide the future growth of charity. Its leading principles lay down that relief must not be given without full knowledge of the circumstances of the case, that relief,

if given, must be adequate, and must be of such a nature and given in such a way as to cultivate, instead of weaken, the moral fiber of the recipient and also of his class.

As the society has no official status, but is a purely voluntary association, of whose functions the giving and distributing of relief form only an incidental, not an essential, part, while the others are of a sort to antagonize vested interests without rousing popular enthusiasm, it has had a very uphill task, and the very considerable influence it now exerts is due mainly to long years spent in steadily "pegging away" by its able and earnest officials and leading members. The society has always strongly advocated the policy of a common understanding and interchange of information between the Boards of Guardians and all charitable bodies, putting it in practice wherever possible. Very thorough cooperation exists between the guardians and charity organization societies and committees in some districts. But this has been brought about by inducing individual guardians to join charity organization societies, and by getting charity organizationists elected upon Boards of Guardians; no general mutual understanding has yet been effected between the latter as a whole and charity organization societies as a whole.

Three instances of misdirected charity may here be quoted, which charity organizationists, in common with other thoughtful observers, have long sought to rectify. Some of our hospitals admit in and out-patients free, others require a "subscriber's letter" before admitting an in-patient, showing that some one had paid toward the cost of his maintenance. But little or no attempt is made by most hospitals to ascertain whether a patient can pay himself, and many private practitioners complain that numbers of persons who could well afford to be their patients obtain advice and medicine gratis at charitable dispensaries or hospitals. Again, candidates for the privileges of many of our older institutions are accepted by the vote of the subscribers, most of whom have of course no personal knowledge of them, and they have to waste time and postage money, which they can ill afford, in canvassing. Thirdly, there is the temporary relief which is forthcoming in profusion whenever there is a rumor of "exceptional distress." To many experienced eyes, relief of this kind appears to do as much harm in one way as good in another, owing chiefly to the extreme elasticity of the adjective "exceptional," and to the practical impossibility of discrimination in distributing it.

Readers of this article who are familiar with the philanthropic achievements of their own country will have noted the contrasts presented by English methods. We have no general governmental supervision of charitable institutions such as is entrusted to the state boards of charities of the Atlantic States, nor anything akin to the unofficial, and yet officially recognized, supervision of the State Charities Aid Association of New York City. At the same time, we have the uniform rate-supported and state-controlled system of relief for the destitute already described, the advantages and disadvantages of which have been very keenly canvassed. On the one hand, the harshness of breaking up households and compelling them to submit to the degradation of going into the workhouse, because, for instance, the head of the family is out of work, is much insisted upon. On the other hand, it is pointed out that, as out-relief is always inadequate, it has to be supplemented by the recipient too often by such undesirable expedients as begging, or underselling the labor of the independent workman. The tendency of experienced poor law administrators is, however, toward curtailing out-relief, while increasing the efficiency of the workhouses, and more especially of the schools and accommodation for children and sick persons. But the question is far too complicated a one to be discussed at the end of this brief paper, from which it has been necessary to omit all reference to the laws of settlement and the treatment of vagrants and to the vast expenditure of charitable effort in the direction of education.

(End of Required Reading for February.)

MILL OPERATIVES IN THE SOUTH.

BY DAY ALLEN WILLEY.

A CLASS of people attracting much attention throughout the country at present are the cotton-mill operatives in the Southern States. The condition of textile manufacturing in the North, especially New England, and the differences between employer and employee in this portion of the country have been one of the principal causes in arousing this interest. The northern mill-owners assert that the scale of wages paid by their competitors and the hours of labor allow the latter to compete successfully with them to such an extent that it is impossible for the New England mills producing certain grades of goods to be operated except at a loss. The labor organizations claim that the competition is not as keen as the mill-owners would have the public believe, and that the cry of "hard times" is a pretext to force wages below an equitable limit.

Without discussing this portion of the question, it may be said without contradiction that the inmates of southern cotton-mills form a most important factor in the present situation. From 32,572, according to the last census, they have increased to over 105,000 men, women, and children. From 254 mills containing 1,800,000 spindles and 40,000 looms the cotton factories in the South have increased to over 500, representing 4,580,000 spindles and fully 111,000 looms. The mill-hands in the South to-day are over fifty per cent of the number employed in the New England States in 1890, and according to the estimates of the best judges are twenty-five per cent of the total number in both sections of the country at present. South of the Potomac River not one per cent are negroes. It might be said here that the experiment of employing colored spinners and weavers has been tried in several instances, notably in Charleston, S. C., and in a mill in Alabama, but thus far without success, as, according to the statement of the managers, while the negroes have been quick to learn, in many instances they are too volatile in their dispositions and have no interest in their work, beyond their weekly wages. Consequently amusements or any other distraction will cause them to leave their machines for a day or a week at a time, no matter how important may be the task at hand.

The contrast in nationality between northern and southern operatives is very great, and here may be found one cause for the success which southern mill-owners enjoy. The influx of Canadians, Portuguese, and other foreigners into the factories north of Long Island Sound has been limited to that district, and the southern labor as yet is mostly American born. What are known as mountaineers have contributed most of the inmates of the mills in the Carolinas, Georgia, and Alabama. Their ancestors have resided in the Piedmont section of the South since the colonial days, and prior to their life in the mills they eked out a wretched existence, obtaining the bare necessities of life from little garden patches on the hillsides and from hunting and trapping, except in some portions of North Carolina, where the people found employment in gathering medicinal herbs. Forced to practice the most rigid economy, the small wages obtained in the factories have seemed generous in their eyes, accompanied with the really pleasant surroundings of most of the factory towns in the South.

These people are content to work from sixty to seventy hours weekly at the loom and spindle, sometimes with less than a half hour for the noonday meal, and often far into the night, at a scale of wages which is from twenty to twenty-five per cent less than the amounts paid in Massachusetts and Rhode Island. They do all the skilled work, negroes being employed

to carry the raw material, as firemen and in other positions where mere drudgery is required. In the mills built within the last decade are to be found many superintendents who acquired their experience in the North or in England. It is the conclusion of the majority of these experts that the "green labor" secured among the southern natives is of as good quality as can be obtained anywhere in the country. Some plants employing five hundred hands in South Carolina have been started with only a score of experts besides the superintendent. Yet no difficulty has been found in training the balance for their several duties, and in a short time they become as proficient as their fellows. There is a prejudice in favor of female labor in not a few of the mills, as the women and girls are naturally quick and ambitious, and the light work is well adapted to them.

The difference in wages between the North and South has changed but little since 1890. The average paid to male operatives in the North was $7.82 per week and $5.49 in the South, to women $5.74 in the North and $3.71 in the South, while children received about double the amount in the North, or $3.75 per week. The recent reduction in the pay-roll at Fall River and other New England cities has reduced the average so that the southern scale is from twenty to twenty-five per cent less, instead of thirty, thirty-five, and fifty per cent less. The total number of mill-hands in the city of Charlotte, N. C., is 1,345, who earn weekly $4,870. This is an average of but $3.62 each. Several other mills in the Carolinas do not average over $3.75 per week, while a company organized near Charlotte employs ninety people with a pay-roll of $350 per week, although this is divided among thirty men and boys and sixty women and girls. This mill has 5,000 spindles, 120 looms, and represents an investment of $100,000. Its weekly pay-roll is but three times the amount of interest on the entire investment, estimating it at six per cent. The city of Charlotte is an illustration of the average paid textile employees throughout the South.

The comparatively small salaries are, however, to a certain extent counterbalanced by the cheapness of living. We have already alluded to the pleasant surroundings of the operatives. Fully seventy-five per cent of the industries are located in the suburbs of towns or in the open country, forming nuclei of independent communities. Obtaining the necessary land frequently at a nominal price or for nothing from the original owners, who realize the advantage to their property of such an industry, the mill companies are enabled to provide homes in the vicinity of the factory for those depending on them. The tenement system in vogue in the North, with its attendant discomforts and hardships, is practically unknown here. A comfortable house of five or six rooms can be built, where a number are erected, for $200. Each has its enclosure of sometimes half an acre of ground, which the tenant can use for raising fruits and vegetables. It may be said here that thousands of families of cotton-mill hands do not pay a dollar for such food in the course of a year, raising everything needful for the table, the only expense being for seeds. Most of the mill towns are laid out with a view to hygiene and the comfort of the residents, with their public squares or recreation grounds, schoolhouses, churches, and frequently supplied with gas-light and water-works. Yet they are in the country as well as the mills themselves, and their inhabitants enjoy some benefits of the city as well as the advantages of pure air and sunlight—which can only be bestowed by nature herself. The schools and churches are frequently built by the mill-owners at their own expense, as they realize what can thus be accomplished in keeping their employees contented with their lot. They often pay the salaries of the school-teachers, these institutions being open to all children within the village limits. Few if any southern mills employ boys or girls under fourteen years of age, and laws in several states limit the age to fourteen.

There are women operatives in mills in Charlotte who actually live on sixty-five

cents per week, yet have the necessaries of life. This may seem incredible to those who are unacquainted with prices of food in Southern States, yet it is a fact. As already stated, many of the mill families pay nothing for fruit or vegetables, their outlay being for groceries, meats, wearing apparel, and the few simple luxuries with which they are content. All provisions are as cheap in the South as in New England, while one can buy beef, mutton, and smoked meats as a rule much lower, partly on account of the abundance of western products, which are sold by the car-load to southern dealers. Wearing apparel averages from ten to twenty per cent more than in New England, for instance, but the short season of cold weather—rarely more than six weeks—and the higher temperature demand but little heavy clothing, and in some districts only what is termed spring or fall weight is used during the coldest portion of the year. For the same reason little fuel is needed except for cooking, and as most of the mill towns are located near extensive timber tracts or adjacent to the soft coal section of Alabama, firewood can be obtained frequently for the cost of hauling it, while coal sells at less than two dollars per ton delivered. Really the item of fuel both to employee and employer, such an important consideration in the North, is so small as to be insignificant. The low price of building material, by which a comfortable home for a fair-sized family can be completed, as already stated, for $200, enables the mill companies to charge but a nominal rental, and in the vicinity of Spartanburg, S. C., no rental at all. At times families are allowed to purchase their homes outright, paying for them by loan associations or instalments of ten to fifteen dollars monthly. Several mills have been erected in South Carolina also on the cooperative or instalment plan, the share-holders including the weavers and spinners. As may be imagined, this plan causes the employees to take a deep interest in the enterprise, as its failure or success means their misfortune or prosperity.

Thus far there has been no disposition among northern textile workers to seek employment in southern mills, possibly because they are aware of the lower scale of wages and unaware as yet of the comfortable mode of living which prevails in this section. There is no necessity for the employment in the South of northern workers, as mill-owners can obtain an abundance of white help in the South for many years to come. In fact, not a few of the smaller white farmers have become operatives, thus giving the negroes, who are by nature tillers of the soil, more opportunity to exercise their proper vocation. This view of northern labor is even taken by the New England companies who have invested in the South during the last few years. Among the latter are syndicates who have built mills at Rome, Ga., Gadsden, and Cordova, Ala. In the aggregate nearly $2,000,000 has been placed in these three plants, yet all combined do not contain one hundred operatives who came from the North.

THE PHYSIOLOGY OF ALIMENTATION.

BY A. DASTRE.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE FRENCH "REVUE DES DEUX MONDES."

WHAT is food? In what does alimentation consist? This is a question to which one will not hesitate to reply if he is neither a physiologist, physician, nor a student of zootechnics. A Frenchman who knows his tongue will say with the dictionary that the name food is applied to all materials, whatever their nature, which habitually serve or can serve for nutrition.

This would be one solution, but there are many others. The problem of alimentation presents a thousand aspects. It is culinary and gastronomic, but it is also economic and

social, agricultural, fiscal, hygienic, medical, and even moral; and first and above all it is physiological. It is from this standpoint that it will be regarded here, in itself, and for itself, and only in its relations with the phenomena of life.

Claude Bernard said recently in regard to life that it was impossible to give a scientific definition of it, and that, furthermore, in the sciences of nature definition was impossible. And that is true, not only of life but of nutrition and particularly of foods. All the physiologists and physicians who have attempted to define a food have run aground here. Most of the common or learned definitions demand the condition for the substance of being introduced into the digestive apparatus. This is to exclude at one stroke, among beings which are nourished, the vegetables and all animals lacking the intestinal tube. On the other hand, it is to cut off from the number of foods all substances which enter by another way than the stomach, and which, like oxygen for example, nevertheless participate in the highest degree in the support of life.

The distinctive trait of food is the utility of which, suitably employed, it may be to the living being. A substance necessary to the maintenance of the phenomena of the healthy organism and to the repairing of the losses that it constantly undergoes, says Claude Bernard; a substance which supplies a necessary element to the constitution of the organism or diminishes its disintegration, according to the German physiologist Voit; a substance which contributes to assure the right working of any one whatever of the organs of a living being, according to M. Duclaux. All these ways of characterizing a food give an incomplete idea of it.

The introduction of the notion of energy into physiology has made the true nature of food better understood. It is necessary to have recourse to the conception from the standpoint of energetics in order to take account of all that the organism demands of food. It demands of it not only material, but also, and above everything else, energy. Naturalists until recently devoted themselves exclusively to the necessity of a supply of material, that is to say, they regarded only one side of the problem.

The notion of the circulation of material has been completed in our time by that of the circulation of energy. All the phenomena of the universe, and consequently those of life, are conceived as changes of energy. They are considered in their connection in place of in their isolation, as was the ancient fashion; each one has an antecedent and a consequent to which it is connected by a law of equivalence that contemporary physics has made known, and thus their succession may be conceived as the circulation of a sort of indestructible agent which changes in appearance in passing from one to the other, but preserves its importance; it is energy.

The most general result of studies in physiological chemistry has been to teach us that the antecedent of the vital phenomenon is always a chemical phenomenon. The vital energies derive their origin from the potential chemical energy accumulated in the immediate constitutive beginnings of the organism. The consequent phenomenon of the vital phenomenon is, generally speaking, a calorific (or heat) phenomenon. Vital energy ends in thermal energy. These three statements relative to the nature, origin, and end of vital phenomena constitute the three fundamental principles, the three laws, of biologic energetics.

The place of vital energy in the cycle of universal energy is, under this head, perfectly determined. It is classed between chemical energy, which is the generating form of it, and heat energy, which is its form of disappearance. From this comes a consequence which finds its immediate application in the theory of food. That is to say, heat is, in the dynamic order, an excretion of animal life, something rejected by the living being, as, in the substantial order, urine, carbonic acid, and water are materials used and rejected by it. One must not, then, speak of the transformation of heat into vital energy in the animal organism, as so many authors do continually, nor of its transformation into muscular movement, nor into animal electricity. This is an

error of theory as well as of fact. It comes from a false interpretation of the principle of the mechanical equivalence of heat. Heat is not transformed into anything; it is simply dissipated.

Is that saying that it is of no use to life? Far from that, it is necessary to it. But its utility has a particular character which must not be misunderstood nor exaggerated; it is not to be transformed in chemical or vital reactions but simply to create a favorable condition for them.

Heat intervenes in animal life in two forms, first and especially, as an excretion or end of the vital phenomenon of physiological work, and on the other hand as a condition of the chemical reactions of the organism. It is not dissipated in pure loss.

To say that food is a provider of energy as well as a provider of material is to express definitely in two words the fundamental conception of biology, by virtue of which life does not set at work any substratum or any force confined to itself alone. The living being appears to us as the seat of an incessant circulation of material and energy which departs from the exterior world in order to come back to it. This material and this energy are precisely the whole of food. All its characteristics, all the rules of alimentation, unfold as the simple consequences of this principle, interpreted by the light of energetics.

And first let us ask, What forms of energy does food supply? It is easy to see that it furnishes two. It is essentially a source of chemical energy, it is secondarily a source of heat. Chemical energy is the only one, according to the second law of energetics, which is apt to be transformed into vital energy. That is true at least for animals; with plants it is otherwise.

On the other hand, the energy put in play in vital phenomena is finally freed and restored to the physical world under the form of heat. This disengagement of heat is employed to elevate the internal temperature of the living being; it is animal heat.

Such are the two forms of energy that food furnishes.

If one would omit nothing it must be added that they are not the only forms but only the principal and most important ones. It is not absolutely true that heat is the only termination of the vital cycle. It is so only when the subject is at rest, content to live idly without executing exterior mechanical work. Mechanical work is a second possible termination of the circulation of energy; not a necessary one, since the movement and the use of force are subordinated to the capricious will of the animal. Again, it may be an electric phenomenon which ends the vital cycle, or a luminous phenomenon, as happens in the case of phosphorescent animals.

It is clear, after this, that if the energetic flow which circulates through the animal leaves it, undiminished, in the form of heat, the measure of this heat becomes the measure of the vital energy, whose origin goes back to the food. If the flow is divided into two currents, mechanical and thermal, both must be measured and their values added. In the case where the animal does not produce mechanical work and where all ends in heat, it is sufficient to capture this flow of energy on its departure by means of a calorimeter, in order to have a valuation of the energy moving in the living being.

Food is a source of heat energy for the organism because it is decomposed there. Physiological chemistry teaches us that whatever be the manner of its breaking up, it always ends in the same body in freeing the same quantity of heat. But if the point of departure and the point of arrival are the same, it is possible that the routes gone over are not always identical. For example, one gram of fat will always furnish the same quantity of heat, 9.4 calories, and will always emerge in the final state of carbonic acid and water; but from the fat to the mixture of carbonic gas and water there are many different steps; in a word, there are varied cycles of alimentary evolution.

From the standpoint of the heat produced it has just been said that these cycles are equivalent; but are they equivalent from the vital standpoint?

Let us imagine the commonest alternative. Food passes from the natural state to

the final state after being incorporated in the elements of the tissues and having participated in the vital operations; the alimentary potential has disappeared in heat energy only after having traversed a certain intermediate phase of vital energy. This is the normal case, the regular type of alimentary evolution. In this case it may be said that the food has filled its whole office, it has assisted at vital action before producing heat.

And now let us conceive the irregular and more simple type. The food passes from the initial state to the final state without being incorporated in the living cells of the organism, without taking part in vital action; it remains confined in the blood and other circulating liquids. It undergoes there at last, however, the same molecular disintegration as formerly, and frees the same quantity of heat. Its chemical energy is changed at the first onset into thermal energy. It has filled only part of its office; it has been of a less vital utility.

Is this a possible case? Can a food be used in the system in these two ways? This is a question widely discussed by physiologists, with great difference of opinion. But if this accelerated evolution of foods still remains uncertain for ordinary foods, there seems to be no doubt about it as concerns certain substances, such as alcohol and fruit acids. When alcohol is taken in moderate doses, about a tenth of the quantity absorbed becomes fixed upon the living elements; the rest is circulating alcohol, which is oxidized directly in the blood and lymph, without intervening in the vital operations otherwise than by the heat it produces. From the standpoint of energetics, such substances are not real foods, since their potential energy is not transformed into any sort of vital energy but passes at one stroke to the calorific form. On the other hand, other physiologists regard alcohol as being really a food on account of the amount of heat that it yields to the organism. Under this head alcohol would be a food superior to carbon hydrates and nitrogenous substances. A fixed quantity of alcohol, a gram for example, furnishes as much heat as 1.66 grams of sugar, as 1.44 grams of albumen, as .73 grams of fat.

This is a conclusion evidently wrong. Experience has condemned it. The researches of Von Noorden and his pupils, Stammreich and Miura, have established in a direct manner that alcohol cannot be substituted in a ration of nourishment for an exact quantity of carbon hydrates. If this substitution is made, a ration scarcely capable of maintaining the organism in equilibrium becomes insufficient; the living being loses weight; the nitrogenous substances which enter into its constitution are broken up and the animal declines.

In the preceding we have confined ourselves to considering a single characteristic of food, the most essential one in fact, its character from the standpoint of energetics. Food must furnish energy to the organism and for that purpose must be decomposed, broken up, and in a way simplified. It is thus that the fats, which are complicated molecular structures from the chemical standpoint, escape in the form of carbonic acid and water. It is the same with the hydrates of carbon, starchy and sugary materials. It is because these compositions descend to a less degree of complication during their exodus through the organism that they give up the chemical energy they concealed in the potential state. Thermochemistry permits us to determine from the comparison of the initial state with the final state the value of the energy yielded to the living being. This value gives us a measure of the alimentary capacity of the substance. One gram of fat, for example, leaves with the organism a quantity of energy equivalent to 9.4 calories. The value of the carbon hydrates is half less, being 4.2 calories. The value of the albuminoids is 4.8. We thus understand why the animal is nourished with foods which are very high products in the scale of chemical complication.

Outside of the theory from the standpoint of energetics, which we have considered above, there is another manner of conceiving the rôle of food. It consists in considering it as a source of heat. We know that a food is a source of heat energy for

the organism. Inversely, will every substance which, introduced into the economy, is broken up with a disengagement of heat be a food? This is a much controverted question even now. Most physiologists admit that it is so. They confound the notion of food with the fact of heat production.

The most imperious need of the living being is to be supplied with heat. The warm-blooded animal possesses a constant temperature, and the very fixity of this internal temperature is a necessary condition to the preservation of his life. On the other hand, in the surrounding medium, colder than the organism, the animal heat is continually dissipated. Therefore a continual supply of heat energy is needed to maintain this indispensable fixity. It is the greatness of the losses which determines and rules the need of foods and fixes the total value of the ration of support.

Such is the theory opposed to the theory of energetics and which contends for the favor of physiologists.

But there are grave objections to it. The heat value of the principal nutritives represents only one aspect of their physiological rôle. It is true that animals and men are capable of deriving the same benefit and the same effects from rations in which one of the foods is replaced by a proportion of two others which develop the same quantity of heat; but this substitution has very narrow limits. And besides, there is a small quantity of nitrogenous foods of which no other nutritive principle can take the place. Furthermore, beyond this minimum, when this substitution takes place it is not perfect; while exact between the albuminoids and the carbon hydrates with regard to fats, it is not so between the last two and nitrogenous materials.

In reality food has another office to fill than that of warming the body or even furnishing it energy. It must not be forgotten that the organism demands a supply of material as well as a supply of energy. It has need of receiving a suitable quantity of certain determined organic and mineral elements. These elements are evidently destined to replace the substances carried away in the circulation of material and to rebuild the organic material.

Magendie, for the first time, in 1836, introduced into the interminable list of foods this first simple division into proteid substances—still called albuminoids, nitrogenous, quaternary—and ternary substances. The proteid materials are capable of sufficing for the support of life. From this comes the great importance which must be attributed to this order of foods. These results have since been verified. Pflüger of Bonn gave a few years ago a very convincing demonstration of them. He nourished, made to work, and finally fattened a dog while giving him nothing else than meat, rigorously freed from every other material. The same experiment has shown that the organism may make use of fats and carbon hydrates at the expense of nitrogenous food and transform each of these substances into the other. To sum up, fat is not needed, nor are carbon hydrates; albuminoid alone is indispensable. Theoretically, animal and man might support life by the exclusive use of proteid food, but, practically, that is not possible for man because of the enormous quantity of meat—six and a half pounds per day—of which he would have to make use.

Ordinary alimentation includes a mixture of the three orders of substances; and in this mixture albumen supplies the plastic element necessary for repairing the organism. The two other varieties furnish energy. In these mixed *régimes* the quantity of albumen must never descend below a certain minimum. In these last years the efforts of physiologists have tended to determine with precision this minimum ration of albuminoids, below which the organism would waste away. Voit indicated for man the figure of 118 grams of meat; it is certainly too high, it might be put down to 100, to 90, and even to 70. But on the other hand the most advantageous ration of albumen must be considerably above the quantity strictly sufficient.

Many other interesting researches have been made along this line which it is impossible to discuss in this paper.

SOME AMERICAN WOMEN IN SCIENCE.

BY MRS. M. BURTON WILLIAMSON.

III.

ALTHOUGH spiders are usually victims to the domestic broom, yet there is nothing more curious and symmetrical than the web some common garden spiders weave. Mrs. Elizabeth G. Peckham has made a special study of these busy workers. In connection with her husband Mrs. Peckham has published descriptive papers on some species of spiders. Their joint work has been published by the Natural History Society of Wisconsin.

MRS. ANNA BOTSFORD COMSTOCK.

One of our foremost American women scientists is Miss Mary J. Rathbun, known especially for her work as assistant curator in the Department of Marine Invertebrates of the United States National Museum. Her systematic work on the Crustacea, especially the crabs, has gained her an international reputation for the thoroughness with which she has prosecuted her researches.

Her writings on crabs have been published by the United States National Museum and the Biological Society of Washington, D. C., etc. The National Museum has large numbers of crabs, many of which were collected by the *Albatross*, and Miss Rathbun's writings are not only founded on this material in the National Museum, but in her researches she has also examined specimens in the museums of Harvard and Yale Universities. Some idea of her work may be gathered from the fact that in a bulletin on "The Genus Callinectes," issued by the National Museum, Miss Rathbun examined something like nine hundred specimens of crabs. She has also described a number of new species of crabs collected by the *Albatross*—a laborious work, as the writer must be familiar with all the known species of the genus and the literature on the subject, otherwise the same type may be described under different names. The amount of critical research and painstaking labor exhibited in a review of the literature on crabs by Miss Rathbun, entitled "Revision of the Nomenclature of the Brachyura," from the *Proceedings of the Biological Society of Washington*, is worthy of special mention.

Anna Botsford Comstock was born on Hilltop Farm in the township of Otto, Cattaraugus Co., N. Y., in the year 1854. Her

FANNIE E. LANGDON.

parents, Marvin and Phebe Botsford, were the children of pioneers who emigrated from New England to the wilds of western New York in the second decade of this century. Her maternal grandfather, Job Irish, was a Friend and came from Danby, Vt. Her paternal grandfather, Daniel Botsford, came from Windsor, Conn., and fought with the Connecticut militia in the War of 1812.

Mrs. Comstock's early education was gained in the common district school. When sixteen years of age she was sent to Chamberlain Institute, at Randolph, N. Y.; she completed the college preparatory course at that institution in 1873. In 1874 she entered Cornell University and completed there in 1876 a special course in history and political science.

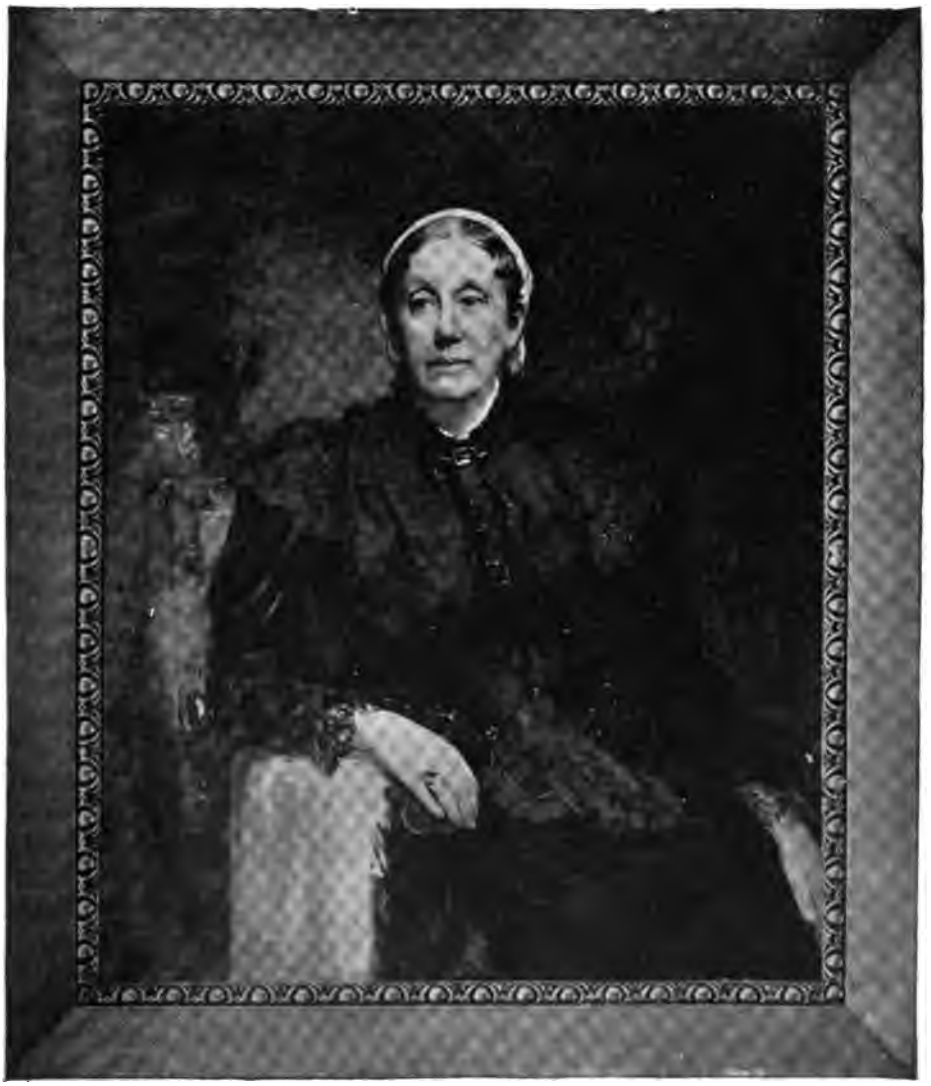
In October, 1878, she became the wife of John Henry Comstock, professor of invertebrate zoology in Cornell University. Shortly after their marriage Professor Comstock was called to the position of entomologist to the United States Department of Agriculture.

While in Washington Mrs. Comstock made many careful drawings of microscopic insects in order to facilitate investigations undertaken by her husband into the habits of scale insects, at that time threatening to destroy the fruit interests of Florida and California. Later, when Professor Comstock returned to Cornell, Mrs. Comstock continued to make drawings for his publications. At the same time she entered Cornell University again, this time for the purpose of studying natural history in order to better qualify herself for her scientific drawing. She received the degree of B.S. from Cornell in 1885. She found the methods of reproducing drawings for printing unsatisfactory and in 1886 began to learn wood-engraving, as this seemed the best and most accurate process for delicate and careful illustration. She received instruction at Cooper Union under the tuition of the veteran engraver John P. Davis. In 1895 the results of her work as an engraver, as well as an artist, were published in "Comstock's Manual for the Study of Insects," which volume contains over six hundred of her engravings. In 1890 she was elected to the Society of American Wood Engravers because of her proficiency in reproducing texture and color in black and white with her graver; and her work has been exhibited with that of the society in the expositions of America and Europe since that date. "Insect Life," by J. H. Comstock, contains many of Mrs. Comstock's later engravings.

Mrs. Comstock's childhood and girlhood spent upon the farm made her an enthusi-

JULIA W. SNOW.

astic lover of country life, and she believes that the influences of the farm upon the child are of the most wholesome and happy sort. Because of this belief she has for many years lectured more or less before farmers' institutes on the possibilities and ideals of the farm home. Because of this work she was made a member of the Society for Promotion of Agriculture in New York State in 1894. This society, under the chairmanship of Abram S. Hewett and the beneficence of R. Fulton Cutting of New York City, and the direction of George T. Powell of Ghent, N. Y., inaugurated the experiment of carrying the teaching of agriculture and nature study into the common district schools. Mrs. Comstock assisted in this experiment in the Westchester schools, and later was employed by Cornell University as an instructor in nature study in the University Extension work among teachers. In this capacity she has taught at Chautauqua in the State Teachers' Institutes for two summers. In December, 1898, she was made assistant professor of zoology (as applied to nature study) in



MRS. ELIZABETH CARY AGASSIZ.

Cornell University, being the first woman to be given the title of professor at that institution.

Mrs. Comstock has her studio at Cornell University next to her husband's laboratory, in order that her work may be done in closest cooperation with him, to insure perfect accuracy. On the walls of her studio are many proofs of engravings given her by the wood-engravers of America. Her collection of engravings, which is large and representative of America's greatest but fast-dying art, is often exhibited to the public.

Mrs. Comstock is at present engaged in engraving some butterflies for a forthcoming book by Prof. Sam. H. Scudder. As soon as these are finished she is to begin upon engravings for another and more extensive work upon general entomology by Professor Comstock.

Miss Katherine J. Bush, assistant in the zoological department of Peabody Museum, Yale University, has written monographs on shells, also in collaboration with Prof. A. E. Verrill of Yale. Miss Bush is the author of "Additions to the Shallow-water Mollusca of Cape Hatteras, N. C., Dredged by the U. S. Fish Commission Steamer *Albatross* in 1883 and 1884," in the *Transactions of the Connecticut Academy of Sciences*, and a "List of Deep-water Mollusca Dredged by the U. S. Fish Commission Steamer *Fish Hawk* in 1880–81–82," published in the *Annual Report of the U. S. Commissioner of Fisheries*. A monograph on two families of bivalve shells by Professor Verrill and Miss Bush, entitled "Revision of the Genera of Ledidæ and Nuculidæ of the Atlantic Coast of the United States," was published last year.

Miss Harriet Randolph, instructor in Bryn Mawr College, studied at Wood's Holl Marine Laboratory before she went to Germany to pursue her studies in science. Miss Randolph's researches on Tubificidæ, or tube worms, were published in journals of science in Germany. Besides researches on annelid worms published in German zoological journals, Miss Randolph has written upon the planarian, or flat worm, and has lately published a work on "Laboratory Directions in General Biology."

Miss Fannie E. Langdon has also published a monograph on one species of worm, entitled "The Sense Organs of Lumbricus Agricola," in the *Journal of Morphology*, and prepared another on the common sea-worm, "Peripheral Nervous System of Nereis Virens." Miss Langdon is a native of Plymouth, N. H. After graduation from the high school and New Hampshire State Normal, she entered the University of Michigan, receiving the degree of B.S. in biology in 1896 and M.S. in 1897. While in the University of Michigan Miss Langdon pursued her original work under V. M. Spalding, professor of botany, and Jacob Reighard, professor of zoology, and was also a student at Wood's Holl Biological Laboratory.

CLARA E. CUMMINGS.

Few names command such universal respect as that of Mrs. Elizabeth Cary Agassiz, whom Prof. Louis Agassiz had the good fortune to marry in the spring of 1850. The generous cooperation of Mrs. Agassiz in establishing a school for girls when Professor Agassiz's income was too limited for his requirements, and her readiness to

assist him in carrying out his scientific plans, are well known.

Mrs. Agassiz kept a journal of her husband's scientific and personal experiences during her travels with him on his scientific voyage to Brazil, and this is embodied in "A Journey in Brazil," by Professor and Mrs. Agassiz.

MRS. FLORA WAMBAUGH PATTERSON.

Mrs. Agassiz is the author of "Seaside Studies in Natural History," written in collaboration with Alexander Agassiz, son of Louis Agassiz. The drawings were mostly by the son, but the text was written by Mrs. Agassiz, with notes and explanations by the former. This work is a study of Radiates. Beginning with sea-anemones it describes various polyps, also hydroids, sea-urchins, star-fishes, etc. Although it is intended for the use of students of marine invertebrates, yet for a bit of fine descriptive writing it would be hard to find anything better than Mrs. Agassiz's "Mode of Catching Jelly Fishes," found in this volume.

Mrs. Agassiz has also written one of the "Guides in Science Teaching," published under the auspices of the Boston Society of Natural History, entitled, "A First Lesson in Natural History." Mrs. Agassiz's "Life and Letters of Louis Agassiz," in two volumes, is found in all large libraries. Lately Mrs. Agassiz has not appeared before the public as an author.

As president of Radcliffe College Mrs. Agassiz exerts an influence, and on one day in the week she meets the students and friends of the college in the parlors of Fay House. Miss Helen L. Reed says, in an article on Radcliffe College:

> It is in the pleasant drawing-room that Mrs. Agassiz, on Wednesdays, through the winter presides over a five-o'clock tea-table and welcomes students and visitors informally to pay their respects; and in this room her portrait by Mrs. Whitman has lately been hung.

As a student of cellular morphology Miss Katherine Foot has published several monographs in the *Journal of Morphology*, under such titles as "Yolk Nucleus and Polar Rings," "The Origin of the Cleavage Centrosomes," etc. Last year Miss Foot was made a member of the committee upon admission to membership in collegiate cooperation in the interest of the Marine Biological Laboratory at Wood's Holl. She is also a member of the American Morphological Society. Miss Foot's work in science was at first undertaken merely as an amusement, but later study at the Biological Laboratory at Wood's Holl gave her study a more serious character. She lectured at this laboratory in 1896, on "The Centrosomes of the Fertilized Egg of Allolobophora Fœtida."

Although a resident of Evanston, Ill., Miss Foot was born at Geneva, N. Y., and was educated in the private schools of that state.

So many women are students and writers in the science of botany that it would be tedious to list the names of those who are doing work along special lines in this science. Only a few of the best known can be cited.

Mrs. Elizabeth G. Britton, wife of Prof. N. L. Britton, Ph.D., director-in-chief of the New York Botanical Garden, is acknowledged as an authority on mosses. Mrs. Britton has edited "Cryptogamic Botany," is one of the associate editors of *The Plant World*, is the author of "Handbook on the Mosses of the Northern United States," has

written numerous monographs upon seedless plants, and also described new species and done original work that has given her an international reputation. Among biologists Mrs. Britton's name is held in high esteem for her conscientious work. She is well known among microscopists for her studies of microscopic plants. Several of her papers have been read before the American Association for the Advancement of Science, "A Hybrid Among Mosses," "A Revision of the Genus Scouleria," "Some Notes on the Genus Eucalypta" being some of them.

Miss Clara E. Cummings, associate professor of botany in Wellesley College, has also for years made a special study of flowerless plants, and has, with Prof. A. B. Seymour of Harvard University, prepared "Decades of North American Lichens," and with Prof. Thomas A. Williams, Washington, D. C., "North American Lichens." Professor Cummings has arranged a list of mosses and moss-like plants—the liverworts —entitled, "Catalogue of Musci and Hepaticæ of North America, North of Mexico," also arranged and revised lists of mosses and lichens for the "Flora of Middlesex County, Massachusetts," and written on cryptogamous plants for other publications. She is one of the editors of *The Plant World.*

Miss Cummings is a native of Plymouth, N. H., and was graduated from the State Normal School of New Hampshire before she entered Wellesley College as a special student. In the summer of 1879 she was appointed instructor in Wellesley, and served in that capacity until the summer of 1886, when she went abroad for study and travel, studying at Zurich, Switzerland, and collecting plants in Italy, Switzerland, and Great Britain. On her return she was made associate professor of botany (with special reference to cryptogamic botany) at Wellesley, which position she has held ever since. In 1896 Professor Cummings made a trip to California in order to study its flora.

A love of botany seemed natural to Professor Cummings, as it is said she began making a collection when very young, and before she was in her teens she could tell every tree which grew in the woods near her home by a small piece of the wood and bark.

Dr. Julia W. Snow, of Ann Arbor, connected with the Biological Survey of the Lakes undertaken by the United States Fish Commission, under the charge of Prof. Jacob Reighard, of the University of Michigan, is studying the microscopical plants of the plankton of the Great Lakes, as she is especially interested in the microscopical forms of fresh-water algæ.

Her investigations in another class of plants have been published under the title of the "Conductive Tissue of the Monocotyledonous Plants."

Miss Snow was prepared for college in Hungerford Collegiate Institute at Adams, N. Y., and in 1888 was graduated from Cornell University, receiving her degree of M. S. from the same university. Her degree of Ph.D. was conferred after a post-graduate course at Zurich, Switzerland, in 1893, and in 1896 and '97 Dr. Snow studied at Basel, Switzerland. Her own taste for botany and the inspiration received from her brother have determined the trend of her studies in the line of science.

MRS. SARA A. P. LEMMON.

KATHERINE E. GOLDEN.

Miss Alice Eastman, of San Francisco, curator of the herbarium of the California Academy of Science, is a well-known writer upon the botany of California. She was formerly editor of *Zoe*, published by the California Academy of Sciences. Another writer upon California flora is Mrs. Katherine Brandegee, who for some years was identified with the California Academy of Sciences as curator of the herbarium and was one of the editors of *Zoe*.

Mrs. Flora Wambaugh Patterson, A. M., of the Division of Vegetable Physiology and Pathology of the United States Department of Agriculture, was an Ohio girl, born in Columbus. She was educated by private tutors, and attended Antioch College and the Cincinnati Wesleyan College, but her scientific training was gained from work at the State University of Iowa, Iowa City, from which institution she received the degree of A. M., and from three years' work at Radcliffe College (Harvard Annex), Cambridge, Mass.

Mrs. Patterson's work has been on vegetable pathology and systematic mycology, involving microscopic study and culture methods. She has charge of the herbarium of this division and catalogues all new fungi, foreign and American. Before going to Washington Mrs. Patterson was associate editor of "Economic Fungi" with Prof. A. B. Seymour, of Cambridge, Mass. A monograph, "The North American Parasitic Exoasceæ," "Species of Traphrina Parasitic on Populus," and other articles published in various publications indicate Mrs. Patterson's line of investigation.

Miss Katherine E. Golden, who is a practical botanist as well as a writer, was born in Stratford, Canada. After studying in the public schools of Massachusetts, Miss Golden was graduated from the State Normal School, Salem, Mass., in 1886 and

was afterward graduated from Purdue University, Lafayette, Ind., receiving her degree of B. S. in 1890 and M.S. in 1892.

After graduation from Purdue University in 1890, Miss Golden worked three years in the United States Experiment Station as assistant botanist, and was then made instructor in biology in the university. She is especially interested in the growth of plants as to length and thickness and fermentation, with special reference to ferments in bread. Her articles have appeared in the *Botanical Gazette*, proceedings of the American Association for the Advancement of Science, and as bulletins from the Indiana Experiment Station, Purdue University, Agricultural Station, etc., under such titles as, "Fermentation of Bread," "Movements of Gases in Rhizomes," "Weight of the Seed in Relation to Production," "Diseases of the Sugar Beet-root," etc., the last two being monographs written in collaboration with Dr. J. C. Arthur. Another monograph, "Red Yeasts," a reprint for the *Botanical Gazette*, was written as joint author with Mr. C. G. Ferris. Miss Golden is a fellow of the Indiana Academy of Sciences and the National Science Club.

Mrs. Sara A. Plummer Lemmon, of California, is well known in that state and Arizona as a field botanist, exploring and discovering new plants in collaboration with her husband, J. G. Lemmon. Dr. Asa Gray, in his "Synoptical Flora of North America," named several species of plants

ALICE MERRITT DAVIDSON.

in honor of Mrs. Lemmon and also one genus, "Plummera Gray." He says:

> She and her husband have shared together the toils, privations, and dangers of arduous explorations in the wilds of Arizona and California, as well as in the delights of very numerous discoveries; so that whenever the name of Lemmon is cited for Arizona plants it, in fact, refers to this pair of most enthusiastic botanists.

The plant referred to is *Plummera floribunda*, discovered in Apache Pass, South Arizona, in 1881.

Some years ago Mrs. Lemmon published

a comprehensive monograph upon the Pacific coast marine algæ, "How and Where to Collect and How to Preserve the Specimens for Study"; the edition of this work is exhausted. She has also written a monograph upon "The Ferns of the Pacific Coast," published several years ago by the California Academy of Sciences, and is now preparing a fully illustrated book on "West-American Ferns and Where They Grow." Mrs. Lemmon has done a large amount of botanic painting in water colors, copying the native flowers and the fruited branches of the cone-bearing trees, such as the pines, spruces, firs, cypresses, etc. These studies have been used in her husband's publications of books upon the cone-bearers of Western North America, and also by the State Board of Forestry of California, Mrs. Lemmon having been its artist for a number of years. She has also sketched in India ink for the California "New Third Reader" and for the *Pacific Rural Press*.

Mrs. Lemmon was born in Gloucester, Maine, and was educated in Worcester, Mass., and New York City. After graduation from the New York State Normal School, she took a post-graduate course in chemistry and physics at the Peter Cooper College Union in New York, while teaching in that city. Her health could not stand the high pressure of work and study and in 1870 she went to California to recuperate. In Santa Barbara she found new life by the seashore and in the mountains and cañons. Everything in nature proved attractive to her—shells, marine algæ, rocks of the mountains, and flowers in the cañons and waysides.

In 1876 Miss Plummer became acquainted with J. G. Lemmon, the botanist, and since that time botany has engrossed her attention. Since their marriage in 1880 Mr. and Mrs. Lemmon have made long trips together, sometimes devoting months to one excursion in quest of plants.

Mrs. Alice Merritt Davidson, wife of Dr. A. Davidson of Los Angeles, Cal., is well known as a student of wild flowers, her special line of study being pollination of California plants by insects. Her new book on "California Plants in their Homes," illustrated by numerous original drawings, is the result of her observation, not a gleaning from other books.

A native of Plymouth, Mich., and a graduate of the University of Michigan, Miss Merritt was until her marriage, about a year ago, a teacher of botany in the California State Normal School. She has frequently given talks on wild flowers, illustrated by hundreds of specimens, before the South California Woman's Parliament, the Friday Morning Club of Los Angeles, and other clubs.

THE UNITED STATES AND HER NEW POSSESSIONS.

BY JOHN W. HARDWICK.

A NEW issue is before the American people—Shall we have colonies or not? Its discussion has already begun in Congress, in the press, on the platform, and even in the pulpit. Divine Providence, or "the fortunes of war," as some people put it, have made us responsible for the welfare of ten millions of fellow beings, most of them only partially civilized; all of them recently released from slavery both of body and soul. They have emerged from this condition partly by their own efforts and in a feeble way under the leadership of men who have had no practical experience in government, no education in the exercise of civil rights, and in most cases impelled by selfish as well as patriotic motives. They have acquired habits of cruelty and corruption both by inheritance and example. They have been taught all the evils of bad government by observation and experience, and their ideas of the blessings of justice and liberty are vague, distorted, and undeveloped.

The situation at the close of hostilities left the government—that is, the people of the United States—but one alternative. They must either withdraw their forces from the Philippine Islands and leave the natives to the mercy of their former oppressors or assume control of the territory. The conscience of the nation would not permit the former course, and we have therefore agreed to take charge of them and pay twenty million dollars for the privilege. Thus they are now on our hands to be disposed of, and the judgment of wise men differs as to the duty of the nation. In his address at Savannah in December, President McKinley put it in this way:

If, following the clear precepts of duty, territory falls to us, and the welfare of an alien people requires our guidance and protection, who will shrink from the responsibility, though it may be grave? Can we leave those people, who, by the fortunes of war and our own acts, are helpless and without government, to chaos and anarchy, after we have destroyed the only government they have had? After destroying their government it is the duty of the American government to provide for them a better one. Shall we distrust ourselves? Shall we proclaim to the world our inability to give kindly government to oppressed peoples whose future by the victories of war is confided to us? We may wish it were otherwise, but who will question our duty now?

In reply the anti-expansionists admit that this country has a duty in connection with the Philippines from which it cannot shrink. Duty, however, does not compel us to regard the Philippines as the fruits of conquest, to be treated as such. We have a duty with regard to Cuba which we intend to fulfil by establishing a government there and exercising a protectorate until such time as it can stand alone. It would seem that duty should require nothing more in the Philippines. Certainly duty does not require the annexation of those far-off islands, especially if such a course be in opposition to the will of the inhabitants.

No definite plans are yet proposed on either side. The difference of opinion may be described by relating an incident that recently occurred at the White House. Mr. Andrew Carnegie—an adopted citizen of the United States, who has had large experience and success in business affairs—called upon the president to protest against the adoption of what is termed the expansion policy. He is extreme in his views. He holds that we cannot keep the Philippine Islands even after paying for them without dishonor and even predicts the destruction of the republic if we attempt to govern colonies. The president frankly admitted—I do not attempt to give his words—that he did not yet see his duty clearly because he was not sufficiently familiar with the conditions of the Filipinos and the wishes of our people. He could not judge what was best upon his present information. He thought it wise to postpone a definite final decision as long as possible. He had devised no plan, but desired to do what was best for the welfare of both, and would be glad if Mr. Carnegie and others who were giving the subject thought would suggest what in their opinion was the proper course to pursue. Like other anti-expansionists, Mr. Carnegie declined to give any affirmative advice, but protested against adding ten million people of an alien race to our body politic, or assuming any responsibility for them either by annexation or a protectorate or as colonies.

Upon these lines the people of the country will divide. With his great respect for public opinion, the president will wait for their verdict to be expressed through Congress, with full confidence in the old adage that the voice of the people is the voice of God. In the meantime, under the principle known in international law as belligerent rights, the captured territory will be governed by military officers designated by the president, with the assistance of experienced officials selected from our own civil service. It is not to be a government by martial law, but the application through American agencies of the laws left by Spain so far as they are practicable, and do not interfere with liberty and the pursuit of happiness. The Spanish officials will be replaced by natives both in Cuba, Puerto Rico, and the Philippine Islands. An effort will be made

to induce native business men and others who have property and other interests at stake to participate in the government, which they have not been allowed to do under Spanish sovereignty. The experts sent from the executive departments in this country will teach the natives how to do things on the American plan; American principles will be proclaimed; and American methods will be applied in all branches of activity; and the islands of the Pacific as well as the West Indies will be Americanized as rapidly as possible.

The administration of General Wood at Santiago is a fair illustration of what will be done in the other provinces and islands. His first endeavor was to clean the city of the accumulated filth of generations, enforce sanitary regulations, improve the sewerage and water supplies, establish schools, reform the courts, and commence the improvement and extension of the public works upon modern lines. The same is now being done in Puerto Rico by General Henry and in Manila by General Otis. No elections will be held for the present, although it is the president's intention to apply the principle of universal suffrage as an experiment in the several municipalities. If it works well there it will be extended to the provinces, and ultimately to the islands at large. His purpose is to give as broad a system of home rule as the circumstances will justify, and gradually educate the Cubans, the Puerto Ricans, and the Filipinos in the science of self-government.

The customs duties and the internal taxation will be regulated at Washington upon the recommendations and advice of the local officials, and will be sufficient to produce a revenue that will not only cover the expenses of administration but pay for the establishment of free schools and the construction of public works, which are not only important but essential to the development of the industries and the resources of the islands. Hitherto the entire receipts of all the islands have been exhausted in the payment of the interest upon the public debt and the salaries of officials sent from Madrid.

The tariff laws of the United States so far as they affect the products of our new possessions will remain unchanged, in order that our local industries and commercial interests may not be disturbed.

The estimated revenue from customs in the island of Cuba will be about fifteen million dollars per annum, and the internal revenue and other taxes will bring the total up to eighteen or twenty million. The customs-house receipts in Cuba in 1897 amounted only to $9,648,369, when trade was demoralized by the revolution. In 1886 they amounted to $15,330,778, without considering the enormous peculations that have been charged against the customs officials. In the tariff schedules that have been adopted for Cuba the duties on most articles have been largely reduced, and those upon the necessaries of life have been entirely removed, upon the assumption that an honest collection of the revenues will furnish a sufficient amount for all the purposes indicated. The total revenues of the Cuban government for 1897, which, as I have said, were greatly reduced by the revolution, amounted to $22,983,993. Under normal conditions they should be much greater. The expenditures of the Cuban government for 1897 were $24,186,309, without including the expenses of the war.

In 1892 the imports amounted to $52,101,682, of which thirty-three per cent were from Spain, thirty per cent from the United States, and twenty-two per cent from Great Britain. The exports in 1892 were valued at $83,018,228, and in 1896 at $87,410,267, of which about eighty-five per cent went to the United States. They were chiefly sugar, molasses, tobacco, bananas, cabinet woods, dye-woods and chemicals, iron ore and hides. The exports from the United States to Cuba in 1893, when under the reciprocity treaty they touched high-water mark, were: lard, $4,023,917; flour, $2,821,557; machinery, $2,792,050; hams, $761,082; corn, $582,050; bacon, $556,747; potatoes, $554,183; beans and peas, $392,962; railroad iron, $327,411; barbed wire, $321,120; railway and street-cars, $271,571;

hardware and tools, $243,544, and other forms of manufactured articles.

The estimated revenues under the new tariff which has been adopted for Puerto Rico will be about four million dollars. Under Spanish rule the revenues averaged about $3,600,000, of which $2,250,000 were from customs. It is impossible to tell what became of this money from the official reports of the island, but most of it was spent in salaries and in the payment of the interest on the public debt.

In 1895, the last year for which accurate statistics have been published, the imports of Puerto Rico amounted to $16,155,056, of which fifty per cent were from Spain, fifteen per cent from the United States, ten per cent from Great Britain, and they consisted of bread-stuffs, provisions, and manufactured articles.

The exports the same year amounted to $14,629,894, of which thirty per cent went to Spain, twenty-five per cent to Cuba, twelve per cent to the United States, and ten per cent each to England, Germany, and France. The chief exports were: coffee, $8,789,788; sugar, $3,747,891; tobacco, $646,556; and honey, $517,746. Most of the sugar was sent to the United States and most of the coffee to Europe. Our exports to Puerto Rico were almost entirely bread-stuffs and provisions.

The reports already received from Puerto Rico show that the duties collected under the reduced tariff by the American officials will exceed those reported under the higher tariff by the Spanish officials.

The statistics of the commerce of the Philippine Islands are inaccurate and incomplete. Their foreign trade under the restrictive policy of Spain has amounted to about thirty millions, of which twenty millions represent exports of fibers, tobacco, and sugar, and ten millions imports of flour, provisions, wearing apparel, hardware, drugs, chemicals, and other necessaries of life. Great Britain and Spain have each enjoyed about one third of the trade. The other third has been divided among France, Germany, China, Japan, and the United States. Our imports of hemp fibers and sugar from the Philippines have averaged about five million a year. Our exports have been nominal, chiefly flour and petroleum. General Whittier, who is now acting as collector of customs at Manila, estimates that the revenues of the custom-houses will amount to at least eight million a year under the present liberal tariff, and it is proposed to collect about five million more from internal taxation, the whole amount to be expended in the establishment of schools and the betterment of the public works of the island, which are in a deplorable condition. The economical expenditure of this amount of money will revolutionize the material condition of the Philippine Islands within a few years.

One of the most important features of the problem is the reformation of the church. The people of all the Spanish colonies are exclusively Catholics. Protestant worship has not been permitted, and the priests have been a powerful factor in the political and official system. The archbishop has been an active and influential member of the government, and the clergy and the parish schools have been supported from the public treasury. This ceased on the day that the American flag was raised, and hereafter the relations between the church and the government will be exactly what they are in the United States. No other plan has ever been discussed or even proposed. Recognizing the importance and the delicacy of this situation, the president has had frequent consultations with Cardinal Gibbons, Archbishop Ireland, and other prominent prelates, who from the beginning have assumed that there must be a total separation of the church and state, and a thorough reformation of the church in all the captured provinces. The archbishops of the Philippines and Puerto Rico have already resigned and sailed for Spain. Archbishop Chappelle of New Orleans has been sent to Puerto Rico to Americanize the church on that island, and Archbishop Ireland has been invited to assume jurisdiction in the Philippines, but feels that he must decline the responsibility because of his age and his ignorance of the language. He thinks

that a younger man would be more useful. The church property in the Philippines is so extensive and valuable that many questions will arise concerning its disposition and taxation, and it is probable that a commission will be appointed to determine them.

The government can relinquish authority in Cuba and the Philippines at any time. The question is, Shall it be done, and if so when? If not, what form of permanent government shall be adopted? Shall the Philippine archipelago be made a territory, like the Hawaiian Islands, or a colony? There is no longer any question regarding the authority. The Supreme Court has anticipated the controversy, and has several times decided, as it did in a recent case of the Mormon Church against the United States, that:

The power of Congress over the territories of the United States is general and plenary, arising from and incidental to the right to acquire territory itself, and from the power given by the constitution to make all needful rules and regulations respecting territory and other property belonging to the United States. It would be absurd to hold that the United States has power to acquire territory and no power to govern it when acquired. The power to acquire territory is derived from the treaty-making power, the power to make acquisition of territory by conquest, by treaty, and by cession is an incident of national sovereignty. These propositions are so elementary and so necessarily follow from the condition of things arising from the acquisition of new territory that they need no argument to support them. They are self-evident.

Thus the question of expediency alone remains to be considered, and upon this wise men disagree. We find among the opponents of expansion some queer combinations, like Mr. Carnegie, who is an ideal representative of the "money power," trusts, and combinations, and Mr. Gompers, the head of organized labor in this country; Mr. Cleveland and Mr. Bryan, Mr. Reed and Mr. Bailey, Senator Hoar and Senator Tillman, who are united in opposition to the president although they differ upon all other questions. There was a disposition in certain quarters to oppose the ratification of the peace treaty in the Senate, and Mr. Bryan, the late Democratic candidate for president, resigned from the army to prevent it, but he soon found that it was impossible, and has called the members of his party and all others who believe with him to resist the present administration in its supposed purpose to organize colonies in the Caribbean and Asiatic seas on the ground that it is antagonistic to the ideas and the ideals of the American people, and in violation of the doctrine that governments derive their just powers from the consent of the governed. He advocates the reservation of naval stations in Puerto Rico, Cuba, and the Philippines in return for services rendered, but insists that independent republics shall be established in each of them. He would not deny the people of Puerto Rico the privilege of living under our government provided they desire annexation, but holds that the Philippine Islands are too far away and their people too different from ours to be annexed even if they desire it.

Mr. Bryan fairly states the platform of the opposition, and will be supported by several eminent and wise men. Senator Hoar is so apprehensive of the dangers that lie in a colonial policy that he has publicly declared, "If we take the Philippines under the treaty of peace the downfall of the American Republic will date from the administration of William McKinley."

With a few conspicuous exceptions the Republican party is practically unanimous in the support of the president, although, as stated, the details of his policy have not been defined or even decided upon. It may be stated generally, however, that he believes the time has come when the United States should take its rightful place and wield its proper power in the affairs of the universe. He recognizes in recent events the hand of providence directing this nation to take its share of the responsibility in the civilization and evangelization of the East. When, at the dawn of that May morning, Admiral Dewey said, "If you are ready, Gridley, you may begin firing," a new epoch in American history began, and the United States unconsciously and unintentionally became a factor in the mighty problem that is being worked out by the two great races of

mankind, the yellow and the white. In that arena, England, Germany, Russia, and France are contending for territory and trade, and it is inevitable that our government must take its place among the empires and participate in a struggle which means as much to us as to them. That we should have at least a share of the Asiatic market is absolutely essential to our industrial existence. What are we going to do with the products of our fields and factories fifty years from now? Our exports of merchandise last year amounted to $1,231,329,950, of which only 2.75 per cent went to Asia; 54.93 per cent went to Great Britain and her colonies, and 90.02 per cent to all of Europe. We cannot sell much more in the households of our competitors of the Old World, but must enter the uncultivated fields that face our Pacific coasts, where a thousand million consumers abide, nearer to us than to any other manufacturing nation, and whose want we can supply. The natural resources of the Philippines are enormous. The productive capacity of the people can be advanced immeasurably by the introduction of scientific methods and labor-saving machinery which we can furnish, and their imports will increase in a corresponding degree. We can teach them to wear clothing, and furnish the material; we can teach them the white-bread habit, and the blessings of corn bread and pork and beans; we can teach them to read and write, and sell them books and stationery; inspire them with a love of the beautiful, and send them pictures and pianos, and we can coin our silver into money for their use. That is what we call civilization, the change from breech-clouts to breeches, from birch-bark to books, from palm-leaves to shingles.

Those who boast of our splendid isolation and declaim against the addition of territory as un-American, forget that every inch of our national domain was bought or fought for. The same arguments that are advanced by Senator Hoar and Mr. Bryan might have been used with equal force to head off the Pilgrims at Delft-Haven, and could have been applied to every cabin that was erected on our frontier. By an inexorable law, which our feeble perceptions cannot comprehend, all human progress is attended by hunger and thirst, the sufferings of women, and the shedding of human blood. It cost a million lives to make this a land of liberty, and our pious forefathers met great difficulties in the colonization of this continent. Without friction we would make very little headway in any direction and the American people will never decline an advantage because of the responsibility that goes with it.

They do not consider the meaning of things,
  They consult not creed or clan;
Behold! they clap the slave on the back,
  And behold! he becometh a man.
They terribly carpet the earth with dead,
  But before their cannons cool
They walk unarmed by twos and threes
  To call the living to school.

THE HIRSCHGASSE IN HEIDELBERG.

BY ERICH KLEINSCHMIDT.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE GERMAN "UEBER LAND UND MEER."

THE Hirschgasse—is that not the celebrated dueling place of the Heidelberg students? So the uninformed ask. But what magic the word conceals for him who was first permitted to jubilate and brandish the spear in old Heidelberg! The clash of the sword sounds again in the old master's ears; he sees himself in duelist garb, the glistening sword in his hand, standing on the spot beneath the chandelier.

Yet associated with this fondest remembrance are recollections of the fairest hours of the academic festival. How splendid was the hall adorned with fresh green, in the brilliancy of the lights at the *Kommers* (convention), when the solemn melody of

the "Landesvater" resounded through the room. And finally the old master, smiling, recalls the moon-lit, warm summer night, full of the odor of flowers and the sound of the beaker. Then there is the drinking in the shady arbor of the garden and the bowls which appear unfathomable are after all finally emptied. In the recollection the perfume of the sweet-scented woodruff is mingled with the odor of the carbolic acid of the operating room, making a rare, pungent aroma.

Yet these are empty words for one who does not know about the place, now a century old, of the Heidelberg student life. Then to the dueling place let us take a stroll on a clear summer morning, which puts one in mind of many a similar day of the happy student time.

We will go across the old bridge to the opposite bank of the Neckar, adorned with villas, and up the river a short distance. On the right is the rushing river, above the splendid ruins of the castle, on the forest-covered hillside, all in the full light of the Palatinate sun—it is a picture of splendid beauty which always delights. Scheffel was right when he said, "No other compares with it." Any judge of the German high school who has traveled extensively must admit that the magnificent Ruperto-Karola deserves the prize.

We go only a short distance up the street along the river, then to the left a path leads into the quiet valley of the Hirschgasse. A colony of villas is now situated on the hillsides—alas! Formerly it was more beautiful, when the little valley lay there so peaceful and secluded.

At the entrance of the path may be seen at the left in the wall a stone whose inscription pertains to the permission to hunt in certain territories given to the Heidelberg students. After a few steps we have reached the old house "Zur Hirschgasse." At the left of the path the stately building overlooks the valley, the dwelling house being nearest the street, and the hall built close to the hillside. In front of the house is a spacious garden, with murmuring brooks and shady bowling-alleys, as well as the above-mentioned arbor, enticing to contemplative refreshment.

We ascend the high stone step to the door of the house and look about us a little. The large guest room at the right of the entrance is copiously supplied with pictures of students, but yet more interesting is the little room opposite. Here hang for the most part old pictures, and here stand two old tables of oak, the tops of which are so thickly covered with names carved on them that for some years there has been no room for others. Hundreds of generations of students have sat at this table. Many a celebrated name stands there carved when the bearer was only a rollicking "corps" student.

But we must go on, for the doctor who attends the duel has just arrived and the *Mensur* (duel) is about to begin. Already on the steps there comes to us the pungent odor of carbolic acid, disagreeable to the uninitiated, but quite home-like to the armed students. This odor cannot be gotten out of the room above, although the windows stand open day and night. This is not to be wondered at, for at least three times a week there is dueling here; the corps has duels Wednesdays and Fridays; Saturdays or Tuesdays belong to the *Burschenschaft* (association of students); then on the other days, there is usually a duel by the members of the other societies. All the *Mensurs* in Heidelberg must be held here according to an agreement. Then the landlord is bound under no consideration to permit a serious *Mensur*, and has therefore a tacit permission to leave the dueling parties undisturbed. In other localities the police would step in, but here certain guarantees are given which prevent as far as possible all danger.

We now step into the repairing room, a spacious vestibule of the dueling hall. On long tables the dueling instruments are laid out. At the left between two windows the surgeon's table stands and before it the operating chair where the bruised heads are mended. Here also the walls are covered with large pictures, often valuable, characteristic pieces from old times.

Through the open door we come into the great hall, which is already crowded with members of the corps and freshmen. High and roomy, with its many windows and the arches over them, it makes a splendid impression. Two large chandeliers and garlands of fresh green make the high room seem more comfortable. Around the walls hang the weapons of the five corps and of the two *Burschenschaften* and between them the corps caps and isolated pictures. The simple pine table shows on its edges the marks of the saber-stroke in deep grooves, and on the floor you can clearly trace the *via dolorosa* which leads from the standing place of the duelists to the repairing room.

The hall is heated, so that the duelists can practice here with all comfort, and there are spectators enough before whose eyes he can show off his art. At the windows of the rear wall where the hall juts against the hillside are grouped Albion's sturdy sons and slender daughters, as well as men and women of German origin. In the English Baedeker the Hirschgasse has three stars, but the guides and the drivers call attention to this wonderful sight, especially if an interesting party comes along, for, as is well-known, the townsmen in a university city, as well as the students themselves, discuss such matters. The stranger willingly drives to the Hirschgasse, for nowhere else does he have such a favorable opportunity to see the student *Mensur*.

The curiosity of the English and their credulous seriousness give the academic wag a pleasant opportunity to entertain them with interesting stories. That noses and ears thereby are made to fly about is a matter of course, but the practical traveler will take with him something tangible as a memento. As he cuts off a chip from Luther's bedstead, so he must bring away with him from the Hirschgasse something for his collection of curios. "The man ought to be helped," thinks the student, and steps boldly to the work. Many a cutlet bone prepared as splinters of bones have we presented to the staring Albion, and from an especially dull specimen were wrested these familiar words: "O sir, this shall be to me an everlasting remembrance!"

Both duelists walk with heavy step into the room and place themselves on the fateful place between the chandelier and the court door. A circle is grouped about; each mounts a stool, or places the stool on the table and himself on the stool. According to the old custom, the quarter of a flask of wine is carried in the breast pocket, that during the *Mensur* the terrible thirst may be quenched. The command sounds; only the whir of the saber or the call of the seconds is heard. Already a couple of gory ones sit. In front of the window a lady faints, which naturally evokes general mirth. One party after the other steps up at short intervals, for the practicing physician who does the mending has by great practice gradually acquired a considerable skill. Now the last duel is over, the room is empty. Before dinner there is half an hour in which to relate the history of the Hirschgasse.

Let us first take a glance at the backside of the house. The hillsides rise aloft in a stately way. Narrow but long, the gardens of the Hirschgasse stretch up the valley. In the court, with its rough old pavement, there is a shooting gallery. On the hillside at the left there is a garden house, the little Cerevis house. Here in the time of the old *Burschenschaft* the "Cerevisia" held its secret sessions. It was a harmless beer place under the supervision of his eminence Theodore Cobbe. A stone, placed in the wall, with the emblem of the "Cerevisia," "Jasmine, wine, and the rose," as well as the inscription, "*Eminentia Eminentibus*," recalls the old times. Later the Cerevis house was a favorite place for bowling. It no longer belongs to the Hirschgasse, but to the neighboring property.

But we will turn back through the house into the garden and seat ourselves in the arbor for a flask of wine. How beautiful the opposite slope of the Königstuhle shows through the open windows overgrown with green tendrils. It is a shame that so much

has been built around; formerly it was an ideal place for quiet thought and dreams. We see before us the stately front of the Hirschgasse with the old-time roof and the small windows in the midst of the hills and the green trees. There is no house which can exhibit such a wealth of important academic history. Only the castle cellar of Jena can be compared with it, but its importance is confined to the history of a single academic society, the *Burschenschaft*, while the entire student body has an interest in the Hirschgasse. This house, in conjunction with the family to which it belongs, has a history which reaches back over an unusually long period of time. Once the entire valley was in the possession of one person and formed an extensive manor. The designation for it was "Hirschgraben" or "Hirschgarten," which later was developed into Hirschgasse. In 1683 the Hirschgasse came by purchase into the Ditteny family, in whose possession it still remains. Although the house possessed the sign "Zur Hirschgasse" in the seventeenth century, the Dittenys did not conduct a tavern, but were engaged in agriculture. When the bridge, now very old, was built (1786–88), the owner at that time determined to begin a tavern on a large scale. In 1790 he built the hall in its present form, at that time a stately building for a private house.

The Hirschgasse at that time possessed the only large hall in Heidelberg, and this was soon called into use. About the end of the century the great balls were held here as well as the Sunday dances, where the students whirled in measure with the joyous Palatinate maidens. But the severe war of the Napoleonic era brought many interruptions to the joyous festivities. The high school stood almost in ruins before Carl Frederick in 1803 woke the people to new life. Chaos and uncertainty reigned everywhere. But finally life turned again into quiet channels. The pleasure of the dance could be again conducted without disturbance. At that time also begins the higher significance of the Hirschgasse to the student. In the fall of 1814 the first Heidelberg *Burschenschaft*, the "Teutonia," was founded. The Hirschgasse was chosen by the association as a house for conventions. Here also on the part of the *Burschenschaft* dueling was conducted, while the *Landsmanschaft* and its successor, the corps, drank and fought by preference in Neuenheim.

The old *Burschenschaft* (1817 to 1827) was, so to say, at home in the Hirschgasse. Here in the daytime there was the drinking of coffee, while in the evening there were drinking bouts and on Sundays dancing. At that time most of the Heidelberg *Mensurs* were held in the hall of the Hirschgasse.

The continuance of the *Burschenschaft* since 1819 scarcely affected Heidelberg. In 1827 the whole body of students had placed a ban for three years on Heidelberg; the corps expanded and took possession of the most celebrated and honored place in the student world, the Hirschgasse. From that time all the drinking bouts were held here, their *Mensurs* fought here, and they felt themselves quite at home. The *Burschenschaft* had respected this ban, and when after its expiration in 1830 they started up again it was impossible to obtain the old meeting-place, the corps was too fast established there. The Hirschgasse was in the possession of the corps as a fencing place or as a house for the *Kommers* (convention). Often the fighting was sharp and one needed a thousand arts to deceive the officer. Once there was fighting in the forest, but as soon as it was possible they returned to the old familiar Hirschgasse. There everything was ready for concealment. In the hall a trap-door was prepared on which the fencing accouterments could be let down into the cellar. There was no less fighting, but it was done with greater secrecy, and as a result with more danger in the healing of the bruises.

Since the beginning of the year '60 the Hirschgasse has not been exclusively the property of the corps. Both of the great *Burschenschaften* founded in 1856 fought duels either in the forest or in strange places, since the corps permitted no one

near itself. But they soon obtained an equal right in the Hirschgasse. Then when more associations for dueling were formed, it was self-evident that all the duels should be fought at the Hirschgasse. It has now become the general dueling place.

As a dueling place, as just said, it is now the general property of the entire student body of Heidelberg. Only the old societies, as the corps and the *Burschenschaft*, feel at home in it, since they have been connected with the history of the house for about a century. This leads one to ask how long the old Hirschgasse will serve its purpose. Countless are the villas which have sprung up on the slopes of the former quiet valley; it would be profitable to make the old fencing hall of Heidelberg students a boarding school. The heart of every old Heidelberg student would be filled with grief if the old hall in whose rooms a century of student history has been enacted should vanish. It would be a calamity if this historic place with its thousand associations should fall a sacrifice to speculation. For the student of arms, with his decided taste for tradition, a thousand recollections hover about such venerable places. It is to be hoped that the old Hirschgasse will remain; it yet stands there, strong and bold, as if it could weather the storms of another century.

THE SPELL OF THE SEA.

BY HELEN G. HAWTHORNE.

OVER the rocks, and backward slipping—
Back in a curling line of spray,
Leaving the sea-weeds drenched and dripping,
Toil the waves through the livelong day.

I watch them falling, eddying, shifting,
Borne by the tide's resistless surge,
Until the ground at my feet seems drifting
Out to the far horizon's verge.

Under the spell of the sea and silence,
I will drift, in my fancy, still,
Beyond the rocks and the purple islands,
Wheresoever the light waves will.

Far and far from the landward shadows,
Over the shimmering leagues of blue,
Until the flowery fields and meadows
Of lotus-islands rise in view.

Safe in their calm, no care shall grieve me;
From the dead past no ghost shall stray;
The years like days shall pass and leave me
Free as a careless child at play . . .

A touch on my shoulder—a light word spoken;
Close at my elbow stands a friend—
So—the spell of the sea is broken,
The drifting stops, and the day-dreams end.

THE BARRYS.

BY SHAN BULLOCK.

CHAPTER IX.

AMONG the willows the fire had burned low; in a soft pile the white ashes lay smoldering; beneath them the dinner was roasting. Nan cut an osier, twisted it into the shape of tongs, drew a potato from the ashes, squeezed it gently between the folds of her apron, and finding it cooked gave word to Frank that all was ready.

On the windward side of the fire, full in the glare of the sun, Nan and Frank sat down on the bare peat bank to their simple meal. There were plenty of potatoes and they were good—dry, large, very hot. There was salt enough for two in the screw of paper, milk enough, if well husbanded, in the can; the heel of a soda cake stood in the basket; for both there was enough, of its kind, and to spare.

Two at a time Nan picked the potatoes from the ashes and laid them on the basket lid; from hand to hand, not without laughter and a deal of bustle and blowing of hot fingers, they tossed them; then shot them from the charred skins, dipped them in the salt, ate, sipped at the milk, and were thankful.

The bank was strewn with hollow skins; here lay Frank's hat, cuffs, pipe; there hung Nan's cap, jacket, apron; through the willows the wind puffed softly, overhead the sun rode gloriously, all round stretched the great desolation of brown bogland.

Said Frank, having swallowed a fiery morsel: "That beat your father's whisky, Nan." Nan laughed, choked a little, answered: "An' *that* nearly beat his daughter." Said Frank again: "This finger blowing seems a great waste of breath." Answered Nan: "It's better wastin' it on good potaties than on bad talk." Said Nan after a while: "Sure such victuals as this must be as strange to ye as flesh meat to a Connaught man." Answered Frank, in the words of the Scriptures: "'Better is a dinner of herbs where love is than a stalled ox and hatred therewith.'" Said Nan once more, with a look at the milk and salt: "Well, there's a roughness (meaning a sufficiency) of victuals, but it's mighty poor kitchen I'm offerin' ye." "What may *kitchen* mean in these parts?" asked Frank. Answered Nan: "Aw, just a trifle to give things a relish." "The bloom on the lips of beauty?" suggested Frank. "Ay, or the sugar after physic," said Nan. "Well," said Frank, and drained his cup, "if the kitchen didn't do its duty, at least the sauce was good." "Is it hunger you're meanin'?" asked Nan. "I do," answered he. "Aw, yis," came back. "Aw, yis; you'll never have to search far for that kind o' sauce in these parts. The Lord sends it in plenty." Said Frank once again: "Well, truly can I say, Nan, that never have I dined more wisely." "Nor worse," added Nan; and that was the last word of table talk that fell.

Nan cleared away the remains of the feast, made up the fire, and took her place beside the dinner basket. Frank watched her for a while; then lit his pipe and stretched himself on his side.

"You must be very glad, Nan, to see the last of the winter?"

Nan gathered up her knees, clasped them with her hands; looked steadily at the fire.

"Aw, ye may well say that," answered she. "I'm gladder of only one thing."

"Yes. And what's that, Nan?"

"Just to see the spring comin'."

"Ah! What is it you like most in the spring, Nan?"

"Most? I dunno. I like iverything—iverything. But mebbe I like best to feel alive again, an' to see the life comin' back all round me."

"Yes? And the winter makes you feel half dead, I suppose."

"Aw, it does."

"What on earth do you do, Nan, all those dreary months, there on that dreary island? You must feel horribly lonesome."

"Aw, I do—sometimes."

"When Ted's not there, for instance?"

Nan flushed; looked at her hands.

"Ay, indeed," she answered. "Ay, indeed."

"You're very fond of Ted, I'm sure?" Frank kept on in that ingenuous way he had.

Nan flushed deeper; began twining and untwining her fingers.

"Aw, I am," said she, very softly.

"Tell me, Nan," asked Frank again, "how comes it that sometimes you wear Ted's ring and sometimes don't wear it? You're without it now, I see."

Slowly Nan turned.

"Ted's ring? Arrah, what ring?"

"Well, the one you wore that afternoon in the little parlor at home."

A smile crept across Nan's face; again she looked at the fire.

"Sure that wasn't Ted's ring at all," she answered. "I bought that meself one day from a peddler. I only wear it now an' again, just for sport."

"For sport?" repeated Frank. "Then you didn't wear it that day—because I had come?"

Nan's eyes began to twinkle.

"Well, of all the questions! Because you had come, indeed! Sure it's little ye were expectin' o' me, Mr. Frank Barry."

Frank laughed; rapped the ashes from his pipe on the toe of his boot.

"You're severe, Nan. I thought perhaps you wished me to see that you and Ted were engaged. ' Did you?" said Frank, looking at her.

"Aw, *that*," answered Nan. "No; I didn't. I meant nothin'—nothin' but a piece o' vanity. An' sure— Sure it's strange, anyway, to hear ye talkin' about Ted an' me in that way. What engagement, as ye call it, would ye have between us?"

"You're not engaged to him then?" asked Frank quickly, solicitously.

"He asked me," answered Nan simply, "an' I didn't refuse him. That's all."

Frank lay back on the bank, clasped his hands beneath his head and looked up at the sky. Nan was free, he told himself in his strength; Nan was free. She had not refused Ted; that was all. The words meant much with Nan; still, what of them, supposing he himself were free?

What utter folly! He must conquer this weakness; must change his thoughts.

How long a time it seemed since the day he last saw Marian. Suppose she knew he were there all alone with Nan? Ah, would she not be moody, be absurdly jealous? He knew it; more than one experience he had had of that childish failing of hers. 'Twas pity; for otherwise she was a dear girl, was Marian.

She was not in the least like Nan. Nan was simple; Marian complex. Nan was humorous; Marian a little sober. Nan was a plain country lass, a maid just as God had fashioned her; Marian was a girl of mind, of training in the ways of the world. He liked both; could almost love. . . .

How he was rambling; how weak he was! Let him firmly and finally change his thoughts. He turned his head; there sat Nan watching him. Her eyes met his and fell. Frank shot upright. Ah, those eyes! He sank back on his elbow.

"Tell me, Nan," said he; then stopped. "Wouldn't you like me, Nan," he went on, "to tell you something about London, about the streets and shops, and all that?"

Nan looked up.

"I'd just love it."

"You've never been to a big city, have you?" asked Frank, looking straight before him. "Dublin, or Belfast, or such like?"

"Never," answered Nan. "Aw, how could I? But sure, it's London I'd like to see above all. A wonderful place it must be—wonderful."

"It is," said Frank; and, once more stretching himself along the bank, went on with his account of the wonders of London.

He spoke of the Thames, the great, mysterious Thames, flowing so silently under its resounding bridges, past the busy

wharves and the homes and fortunes of millions; and Nan, listening eagerly, declared that it was wonderful. He told of the roaring streets, described the buildings and monuments, the parks and commons; and Nan, listening open-eyed, affirmed again that it was wonderful. He closed his eyes and pictured in glowing words the panorama of fashion and beauty which, in the season of seasons, displays itself to an admiring world marshaled in green chairs under the shadow of great Achilles; and Nan, listening almost breathless, declared that never had she heard the like. He smiled to himself, and made a bold raid on the shops; spoke of the marvels in millinery that hung behind acres of plate glass, of the wealth untold in diamonds, rubies, necklaces, bracelets, that glittered like the stars of heaven along the somber streets; and Nan, her eyes shining in the wonderment of a child, cried out that her head was whirling, that it was great, great entirely. Then, tired of these airy flights, Frank entered the portal of the Museum, crossed the hall, and stood Nan beneath the giant dome of the reading-room. With what feeling he now spoke, what pride, what bitterness. See, there, in that high-backed chair, among all those bent backs and pallid faces, there sits Frank himself, diving in mighty tomes for pearls wherewith to embellish his weary pen. Ah, the headaches he had endured in that weary seat, the heartache, the despair; and what triumphs had started there, what fame! But perhaps he was wearying Nan? No. Really?

"You like to hear about my work, then?" asked Frank, turning his face for a moment from the glory of the sky; "you are interested in it, Nan?"

"Aw, yis," came back, in a voice not a little awe-struck; "sure it's mighty strange to me."

"You like books, maybe?" said Frank again, smiling at his knowingness and Nan's simplicity. "Perhaps you share my tastes, Nan?"

"Aw, I do," came back. "Aw, mebbe so; anyway, sure I like to hear ye."

So Frank once more looked up at the sky (whence came his inspiration that morning, his inspiration and strength), and continued his talk; discoursed of his work, books, hopes, ambitions; after a while came closer to reality and spoke of the great mission that had brought him to Ireland. He was contemplating a novel. He wanted to make observations of place and character. Part of his story would have its scene in London; part, Frank waved his hand, somewhere under this very sky.

"Aw! Is it—is it put this," Nan looked about her, "in a book ye would?"

"Yes, Nan." Frank smiled. "Why not?"

"Sure—it's not this kind of place I ever read about in stories. Aw, no."

"What kind, then?"

"Aw, grander places than this."

Again Frank smiled.

"You've read about palaces, and mansions, and high-born ladies, Nan? Am I right?"

"Ay; something like that."

"Ah, yes. Well, I am content to leave such big game for the sport of others." Frank's voice swelled. "It's you, Nan, you and your equals, that I hope to see figuring in pages of mine. Yes; you and your equals, if such there be."

"Me?" Nan threw up her hands. "Me in a book? Aw, sure, an' you're jokin', Mr. Frank?"

Frank shook his head. No; he was not joking. Still, leave that question for another occasion. He was anxious, just then, to introduce to Nan a few of the English characters, drawn from life, that were ready to take their places in this story of his.

First of all, there were two dear old people of his acquaintance whose portraits he meant to paint. In his book they were to be called the Roys; but in real life they went by the name of Dent. The heroine was their daughter Marian, Marian Dent—pretty name, was it not? But never mind her just now. Let Frank go back to the old people. There was not a better soul living than Mrs. Dent. She was small, swarthy, old-fashioned, sweet-tempered; the

dearest body in the world. Her husband, Mr. Dent, was quite unlike her, but in himself was a worthy man. He had not much brain, nor education; but he was upright and good-hearted, with a fine gift of old-time courtesy; and by habit he was methodical as a machine. A fine character old Roy would make; a character which if properly drawn the world must proclaim great.

There was a pause. Frank lay smiling at his thoughts. Nan watched him for a while; then said she:

"An' himself an' the wife'll be glad to see themselves in print, I suppose?"

"Oh, yes, Nan. They know of my intention."

Another pause came; then said Nan again:

"Ye must ha' seen the two o' them often enough to know them so well?"

"Yes; very often."

"An' the daughter, too?"

Frank looked round quickly.

"Why do you ask that, Nan?"

"Aw, just because—just me inquisitiveness. What kind might she be?"

Frank fixed his eyes on the sky and smiled. Nan was not so simple as she looked. She had guessed how matters stood. Was she jealous of Marian? Or was she only inquisitive?

"She's like you, Nan, in some ways," he answered; "in most she's quite unlike you."

"An' you'll be marryin' her some day?"

Frank stared.

"Marrying her! Why, what on earth put that in your head, girl?"

"Aw, I just thought it. Sure it'd be only natural. But no odds. Tell us more about the story."

Frank went on telling about the story. There was still another character that he meant to paint from life. A Scotchman he was, his best friend. Rab was his name, Rab Lindsay. Ah, a good friend Rab had been. How many kindnesses had he done, how many faults forgiven. No matter. God bless old Rab! He wished he were sitting there with them; he wished Nan knew him; he wondered how the dear fellow was, and what he was doing. How well he remembered their last evening together. He had never told Nan about that; well, let Nan listen.

"We were in my little den," said Frank, and sat upright on the peat bank, "smoking together and talking. Rab was down among the rickety springs of my single armchair, drawing at an old black pipe. I sat tilted back in my creaky chair, my feet on the mantelpiece, my head enveloped in clouds of smoke. All round," Frank waved his lily hands, "were my books, littered on the floor, heaped on the table, piled on the chairs; on the walls were some prints, cheap, but good; there were portraits about, and manuscripts, and dumb-bells and foils —the usual sanctum of your literary man."

"An' is that the kind o' place ye live in, Mr. Frank?" asked Nan. Looking intently at him she sat, hands round her knees, body inclined a little forward.

"That's it, Nan. Oh, it's quite usual—quite usual. Well; after a while, *bang*, *bang*, comes the postman's knock at the door below, and *thud* something falls on the hall floor. 'The inevitable,' said I to Rab, and laughed gaily enough; 'the inevitable,' said I, and waited with certitude. Presently, *tramp*, *tramp*, comes a foot up the stairs and stops outside my den. 'Come in,' said I at the knock, 'come in. Throw it on the table, Jane,' said I, without troubling to turn my head. . ."

"An' who may Jane be?" asked Nan.

"Oh, the servant, Nan; only the servant. Well; a while passed. I was in the middle of a criticism of one of Mat. Arnold's books, when Rab, who usually says very little and observes a lot, leaned forward and took Jane's packet from the table. 'Oh, never mind, Rab,' said I; 'it's only that article back from *The Nineteenth Century*. It always falls like lead on the linoleum. Come; drop it, and lend me your ears.' I talked on for another while; then once more Rab interrupted me. 'Don't you think you'd better open this?' said he, lifting the letter from the table. 'No!' shouted I. 'May I open it?' asks Rab. 'And burn it,' snaps I; and fires away at

my talk. Ten minutes more went. I was in the thick of an argument. Over leans Rab and hands me a document. 'Read that,' says he, 'and stop your cheap criticism.' I swore; clutched the paper; read —and jumped from my chair. What do you think the paper was, Nan?"

"I dunno. Tell me quick."

"Make a guess."

"A love letter."

Frank laughed.

"Ho, ho! Think of a love letter making one jump from one's chair. No, Nan; it wasn't. It was part of a communication from a firm of New Zealand solicitors, telling me that a distant relative had died, leaving me a small legacy of two hundred pounds."

"Aw," gasped Nan. "Two whole hundred pounds!"

"Yes; two whole hundred. It was a god-send. That money was useful, I can tell you. It will be useful yet," said Frank, and thought of his dear Maid Marian. "It is useful now," said he rising. "Only for that money I should not be standing here this mortal minute."

"Ay," said Nan, half questioning.

"It gave me the opportunity to take a long-wished-for holiday," Frank went on. "I discussed the matter with—with Rab and others, decided to start, packed my bag, and here I am. Are you sorry that god-send came, Nan?" asked he, and poising on heel and toe looked down at her.

Nan rose.

"No," said she. "I'm not sorry. I'm— What'd be the time, Mr. Frank? Three o'clock! Aw, dear gracious, but the time has gone. It's wonderful!" And off Nan ran across the heather. And as Frank Barry followed her his thought was that, had fate willed it, it were now the easiest thing in life to work love's bidding in that simple heart.

Again Frank bent among the heather. Very swiftly Nan worked; very little did Frank help her. She spoke but seldom; quite content she seemed to listen to Frank's chatter of London life and ways, of himself and his literary labors. Sometimes, in showing how best to lay a turf in position—they were now building wet peat into little wind-rows—her hands touched his; and Frank was glad, but Nan seemed sorry. Once or twice, as Frank questioned her in softest voice, she bit her lip, flushed charmingly, turned away; and only his heaven-sent strength kept Frank from enfolding her in his arms. Again—it was during tea-time, as they sat once more by the fire, among the willows, sipping tea from the same cup and breaking the same piece of bread—Frank almost forgot his vows to Marian, and almost made open love to Nan; and Nan, at the same moment, as if divining his heart, knelt quickly by the fire and fell to scattering the coals.

The sun was falling fast upon the mountain when Nan began carrying the dry turf across the heather; the shadows were very long when the last creelful was piled high above the gunwales; it was growing chill when Nan set the cot's head for Inishrath, and slowly (for the cot was well laden, and Frank, sitting beside Nan on the thwart, hindered more than he helped her) passed down the river and along the misty shores of the lake.

And there again were the white cottages, and the eternal hills, and the lonely islands. And the water splashed from the oars, and rippled among the stones, and came flapping against the long sweep of the gunwales. And Frank talked and quoted, sang and romanced. And Nan laughed, and sang, and listened. Then dusk came. Along Inishrath went the resounding clank of the oars. Down fell the dark; out came the stars; and there, once more, was the pier, and the big ferry cot, and the light shining beyond the trees in the home of the Butlers.

"Tell me, Nan. Tell me. Have you enjoyed your day?"

The cot was swinging round. Frank's voice came low and soft. Nan sighed; for a moment rested on the oars.

"Aw, I have; I have. Never will I forget this day. Never."

"And you're not sorry, now, you came for me this morning? Are you, Nan?"

The cot struck the shore. Nan turned away her face.

"Are you, Nan? Answer me!"

And just then a heavy foot sounded on the pier.

CHAPTER X.

TED Ross came down the pier; stopped opposite the thwart on which Nan and Frank were sitting; with his legs straddled and his hands deep in his pockets, looked down upon Nan.

"Aw, it's you, Ted?" Nan shipped an oar. "It's you?"

Ted stood silent.

"Good evening, Mr. Ross," said Frank rising. "It's a beautiful night, isn't it?"

Ted did not answer. Nan picked up her basket and rose. Down the pier came the heavy tread of John Butler.

"So you're back, childer," said John. He stopped beside Ted. "Faith, an' good time, too. Here's Ted an' meself's been watchin' the stars an' waitin' for ye this two blessed hours. Divil's in me, but till I heard the rattle of the oars 'twas in a bog-hole I was 'feered 'e were, or mebbe down in the mud wi' the eels careerin' through your bones. An' for Ted here, it's as glum as a dead pig he's been; as glum an' as speechless."

"Aw, sure," laughed Nan. She held up the basket. "Here, Ted, take this from me."

Ted did not move. Frank sprang out upon the pier; turned and stretched a hand.

"Allow me, Nan." He gripped the basket; and quickly Ted caught him by the shoulder, swung him round, and sent him staggering across the pier.

"I'll allow ye!" cried Ted. "I'll allow ye! Come out," he shouted to Nan. "Come out, I tell ye; an' quick."

John Butler stood dumfounded. Frank hung back on the farther side of the pier. Nan stepped from the thwart; and at once Ted clutched her arm.

"Come away," he said through his teeth; "come away."

Nan faced him.

"Ted," said she, her voice low and tense; "Ted, in God's name, what's all this about?"

"Come away," was Ted's answer. "Come away wi' me." He pulled at her arm. Nan walked a step or two, then stopped.

"I'll not go," cried she; "I'll not go till ye tell me. It's disgraceful!"

Frank crossed the pier. John Butler laid his hand on Ted's shoulder.

"Ted, Ted, man," pleaded he. "Why, Ted, me son!"

"Arrah, stand back, ye ould fool," cried Ted, swinging from John's grip. "Can't 'e mind your own business? Haven't I had enough o' your blasted talk this two hours? Come on," cried he, and pulled again at Nan's arm. "Come away wi' me."

"No, Ted," answered Nan. "No. Oh, it's disgraceful!"

Frank stepped forward.

"One word with you, Mr. Ross," said he, "May I ask you before you go—"

Ted dropped Nan's arm; turned to face Frank.

"You'll ask me nothin'," he said. "You'll ask me nothin'."

"Then, can you ask me anything, Mr. Ross?"

"Ask you anything?" Slowly Ted repeated the words. "Ask *you*? Yes, I can." Ted came nearer Frank. "Who asked you, Mr. Frank Barry, to go stravagin' about the lake wi' Nan Butler all the day, an' to keep her out till this hour o' the night? Eh? Who asked ye to do that, Mr. Frank Barry?"

Nan gave a smothered cry. Said John: "For shame, Ted; aw, for shame, man!" Frank drew back a step.

"Oh, it's that," said he.

"Answer me question," Ted persisted. "None o' your quibblin' here. Answer me question."

"I will. I asked myself."

"Ay. Ye asked yourself. Just so. Ye were at a loss for somethin' to do, Mr. Barry, this fine spring day; so, to amuse yourself, ye must come where you're not wanted, an' go where ye had no business, an' lure a decent girl away——"

"Aw, for shame, Ted Ross!" shouted

John Butler. Nan stood silent, but with galloping breath, beside her dinner basket.

"Will ye whisht," cried Ted, turning to John, "an' mind your own affairs?"

"Aw, shame on ye, Ted Ross!" shouted John again. "Shame on ye!"

Frank raised his hand.

"Just one word," said he. "Will you come a little way up the lane, Mr. Ross, and have a talk with me?"

"Naw," answered Ted. "I'll be hanged if I do."

"Then suppose," Frank went on, "we meet to-morrow and talk over things?"

"Suppose," Ted broke in, "I wipe ye across the mouth where ye stand."

The words came hot and fierce. Again Nan smothered a cry. John Butler broke into a babble of remonstrances. Frank drew a long breath, clenched his hands; stepped forward.

"Suppose you do," said he, as coolly as he might. "I'm ready."

Ted raised his hand.

"For two pins I would," said he; "for two pins I'd break the mouth on ye."

"Do it," said Frank; and the next moment Nan had Ted by the arms, and was between him and Frank, and was imploring him to be quiet.

"Come away," she cried. "Aw, God's mercy, come away!"

He struggled hard, fumed, and swore; then Nan raised her face.

"Ted," said she; and with the word he dropped his arms, turned and slowly went with Nan along the pier.

The two left the shore; passed through the trees, struck the lane; and midway between the lake and the green gate Nan stopped.

"So this is what you've done!" cried she.

Ted walked a step; paused, stood looking between the hedges.

"This is what ye think of me, Ted Ross!"

Ted kept silent.

"This is how ye show your respect for our friends, an'——"

Ted wheeled round.

"Friends!" said he bitterly. "Ye call that man a friend? Tell me," said he, clutching at Nan's arm, "how did he know ye were goin' for turf the day? Who told him? Was it you? Answer me, Nan Butler! Was it you?"

"It wasn't. It was pure chance."

"Chance! Tell me, I say; was it you?"

Nan made as if to walk on, but Ted held her back.

"Answer me! Answer me quick, Nan Butler!"

"I have answered ye, Ted Ross. I've told ye the truth. Truth!" cried Nan, with a stamp of her foot. "That I should have me word doubted, an' by you!"

A pause came. Breathing heavily, Nan stood looking up the hill. Ted hung his head for a minute.

"Well, I believe ye, then," said he.

"I thank ye."

"See here, Nan," Ted went on; "ye may think me a fool. Mebbe I am. God knows. But the divil's been in me this two hours. I can't help it. Come now; what'd ye think yourself supposin' I was to go for a whole day with a lassie, an' come home with her, an' be sittin' beside her? What'd ye think, now?"

"I'd think nothin'." Nan turned on the lane. "What is it you're thinkin' of me?" she asked.

"I heard ye singin' together down the lake."

"Well?"

"He was whisperin' to ye just before ye landed."

"Well?"

"What was he whisperin'? What did he say?"

"What d'ye accuse me of?" cried Nan.

"Answer me, Nan Butler. What was he sayin'?"

"I'll not answer ye. I scorn to answer ye."

"What did he say to ye comin' home? What did he say to ye all day long? Tell me this." Ted's voice fell husky; he plucked at Nan's sleeve. "Did he make love to ye?"

"I scorn to answer ye."

There came to Nan, as she stood there beneath the stars with Ted's hand on her arm,

a quick memory of many things that Frank had said to her that day, of many looks he had given, of many things that had puzzled her a little, and vexed her, and—yes, gladdened her a little; and, with the memory, she paused and dropped her eyes. Had Mr. Frank made love to her? Had he? Had she encouraged him in any way? Done anything to give Ted cause for this sudden burst of jealousy? No. She had only been glad to have Mr. Frank with her, to hear him talk, to laugh with him. . . .

"It's true, then?" cried Ted, his grip on her arm like a band of steel. "It's true, then? Did he make love to ye?"

What could Nan answer? Her thoughts were whirling, her heart was flying; this question of Ted's brought such a rush of new thoughts and feelings, left her in such bewilderment betwixt what she knew and what she did not know. She could not lie; could not gain time, could scarce think. Again Ted shook her.

"For the last time," said he; "for the last time, Nan Butler, I ask ye: Did he make love to ye this day?"

For a moment Nan hesitated; then raised her eyes.

"Before God, Ted," said she, "I don't know."

Ted let go her arm, and turning toward the hedge, looked out between the starlit sky and the sleeping fields. She did not know! That was the answer, that the quibble! She did not know! He turned again, and full of the bitterness born of anger and jealousy, spoke out all manner of foolish things.

It was well to know in time; it was well to know the worst. He had been a fool. Oh, he remembered many things now. He had seen Barry looking at Miss Butler, and Miss Butler looking at Barry; he had seen Miss Butler dropping her eyes and blushing. No matter what he had seen. It was all the same. Divil cared. Barry might come to Inishrath night and day for all he cared; he might go for turf in the ould cot from then to kingdom come for all he cared.

"For God's sake, Ted," cried Nan, "what is this you're sayin'?"

Ah, it was nothing. Only a few remarks he was making to himself. It was a fine night, glory be to God. It has been a grand day entirely. He wished to goodness he had been in the bog, hiding behind a clump and watching Barry at the courting. It must have been powerful comical to see.

Nan stepped forward.

"Ted," said she, "is it mad ye are?"

"Aw, not at all, Miss Butler," answered he; "not at all. Sure I'm only picturin' things to meself. An' sure ye needn't be distressin' yourself anyway—an' you able to say before God that ye don't know anythin'."

"I've told ye the truth, Ted; all of it. Would ye have me lie to ye?"

"Aw, not at all," came back, still in that halting undertone; "not at all. Why, woman dear, it's only a trifle; sure it's only as one ought to expect. Why shouldn't ye give an ignerant booby like me the back o' your hand, an' listen to the palaver of a fine gentleman from London? Why not, indeed?"

It was useless, Nan knew, to say more. In his present mood, Ted was ready to say anything, to do anything; if she went on her knees to him he would only laugh; if she answered him according to his folly there would surely be a scene, a quarrel; if she tried to explain he would return to that miserable question. She walked away a step or two; stopped and turned.

"An' this is all you've got to say to me, Ted?" Nan's voice came pleadingly.

"That'll be all." Ted stood silent a minute with his face to the hedge; suddenly wheeled around.

"Wait," cried he; "wait. There's one thing I'll be sayin' to ye. Don't be thinkin' that I'm done wi' ye; don't be imaginin' I'm goin' to let any man step into my shoes so long as there's a hand on me. Go your ways; but, by God, I'm not done wi' ye yet!" And with the word Ted strode off toward the lake.

Quite still Nan stood till the clank of Ted's oars came up to her between the hedges; then turned for home, slowly went up the lane, through the back gate, across the yard, lifted the latch, and went in.

Her mother was sitting by the hearth plying her needle on John's corduroys; close to the chimney jamb old John was nodding in his chair over an empty pipe. The glare from the fire and from the lamp made Nan wince; she turned toward the dresser, took off cap and jacket, and hung them on a nail. Ah, but she felt miserable. Ah, but her heart was stony cold.

"Where's Ted?" asked Sarah sharply.

Still with her back to the fire Nan stooped and pretended to tie her boot lace.

"D'ye hear me, Nan?" Sarah turned quickly. "Where's Ted, I say?"

Nan faced the fire.

"He's gone home, mother. Would there be any supper ready?"

"An' why has he gone home?" asked Sarah, and over her spectacles searched Nan's face.

"He didn't say." Nan pulled a stool to the hearth and sat down.

"What kept ye so late?" asked Sarah, after a pause. "Look at the time o' night."

"There was a lot to do, mother—an' Ted an' I were talkin' a while."

"I thought he'd have a word for ye," said Sarah with a nod. "He was expectin' ye before this, I'm thinkin'. Will he be comin' the morrow night?"

"I don't know, mother; he didn't say."

"Ay? An' is Mr. Barry gone home, too? Why didn't he come in?"

Nan took up the tongs and began mending the fire. Her face had gone hot. She could almost feel the keenness with which her mother was watching her. Ah, if she could but get to bed.

Sarah went on questioning. How had Mr. Barry come to know she was going for turf? Who had asked him to go with her? What did he have to eat and drink? Did Ted see him? What did Ted say? Glibly, persistently, Sarah questioned, nor failed to keep one eye on Nan and one on her patching; wearily, reluctantly, Nan answered; at last, her patience exhausted, looked at Sarah and begged to be left alone. She was tired, hungry; her head was aching.

"Ask me in the mornin'," pleaded she; "ask me in the mornin'."

"Aw, very well," said Sarah; "very well"; then, with a grim smile playing about her mouth, folded her work, rose, and began preparing supper. No need was there to question further, she thought. She knew enough. Sarah Butler was no fool. She had seen how things were going. Young men didn't come kaleying with old people; young men didn't sit staring at girls just for sport; didn't sit beyond on Garvagh quay just to let the sun shine on them. Aw, no, thought Sarah, as she lifted the porridge pot from the crook; 'deed they didn't. And now sport was in view. There had been words and threats. There sat Nan as miserable as a sick child. And all because of this Mr. Frank Barry, with his smooth speech and pleasant ways. Yes. She knew these Barrys. She minded the father. There was a look about the son's eyes she had seen before—aw, such a knowing look when a woman happened in sight. Yes; things had happened. There'd be the piper to pay one of these fine days, thought Sarah; and whoever paid it, might Frank Barry have his share of the sport; for 'twasn't much either of pleasant speech or pleasant ways he'd ever thrown in her direction. No. And now let Nan stop her wool-gathering, and sit over to the supper her ould mother had got for her. "Sit over," said Sarah in her sharp way; "an' thank God for all his blessin's to ye."

So Nan sat over; and half way through supper in came John, with a kick at the step and a rush at the door. His face shone red as a coal. His eyes flared. He flung Nan's dinner basket into the corner; threw his cap on the dresser shelf; gulped his supper; then clattered his stool to the hearth and burst forth.

A pretty disgrace this was. Did sons of man ever hear the like? shouted John. A friend of his, a Barry, a man who had sat by his hearth and eaten his bread, to be threatened and disgraced on Inishrath Island; to be treated like a dog, like a beggarman from the mountains! Aw, words failed him. 'Twas scandalous, 'twas infamous! And all for what? All because a friend of his had gone for turf with

his daughter Nan. There was for you! That was the kind Mr. Ted Ross had turned out, the ugly, blackguardly, impudent, ungrateful hound! What! Did Nan dare to defend him? Did she dare, after all she had seen that evening? Let Nan listen. If ever she crossed words with that whelp again, she might walk out forevermore across that threshold. Did Nan hear that? shouted John.

"I hear ye," said Nan.

"You've done with him from this day forth," shouted John. "He's a black-mouthed puppy. I passed him on the lake when I was comin' back from Garvagh, and he called me all the names a fishwife ever threw at a tinker. He's a blaggard."

"Och, whisht, John, whisht," said Sarah. "Sure, the poor boy was angry. Sure, he'll be sorry for it all in the mornin'."

Aw, let Sarah keep her blarney for calling the ducks. What did Sarah know? Had Sarah seen Ross at his capers that evening? Had Sarah seen him rush at Mr. Frank; had she seen him frothing on the pier below like a mad dog? Ah, let Sarah whisht; let her keep her blarneying for poor Mr. Frank. There was a man for you! He was grit to the backbone. He had defied Ross to his teeth. He was the boy; och, he was the fine ould stock! And to see him all the way over in the cot; sitting there smoking his pipe, and laughing and joking just as if nothing had happened. And to hear him at last as he stood on Garvagh pier bidding John good-night.

"'Well, good-night, John,' says he to me, that cheerful and merry; 'good-night. It'll be a long time before I come to Inishrath again, I fear.' 'How's that, Mr. Frank?' answers I. 'Oh, I'll be afraid o' me life,' says he, an' laughs. Then I comes to him, an' takes his hand, an' grips it hard, an' says I to him: 'So long as there's breath in me body, Mr. Frank, you're welcome to Inishrath; an' all I have is yours, Mr. Frank; an' may the divil have the man that insulted ye this night. Come often,' says I; 'come often, an' stay long.' An' the last word he says to me is this: 'I will, John; I will.'"

Like that John talked for may be an hour; with Nan giving but half an ear and Sarah listening hungrily, and old John gazing solemnly across the hearth; at last talked himself weary and stooped to the fire. Nan gave a sigh of relief. Old John began wagging his head. Sarah rose.

"Well, it's a curious world," said she, and took the old man by the arm, "a mighty curious world. Come away to your bed, father; come away; an' be thankful to God you're near your grave."

"Ay, ay," said old John, staggering to his feet. "Ay, ay. Good-night to ye all; an' I'm thankful to ye, John, for your powerful discoorse."

"Good-night to ye, father," called John. "Sound sleep to ye, me son, an' long life. Aisy, Nan," he went on. "Where are ye goin'?"

"To bed, father. I'm tired."

"Ay; I accuse ye are," said John; "it's been a long day for ye. Look here, me girl; you're not sorry for anythin' I've said the night? Eh?"

"I'd be gladder if ye had said less, father."

"Ay? An' what oughtn't I to have said?"

Nan moved toward the door.

"Is it what I said about Ross?" asked John. "Is it that?"

Nan came to the door, opened it; for a moment stood with the knob in her hand.

"Aw, poor Téd," said she and walked on. "Aw, poor, poor Ted!"

Slowly she went up the stairs, turned along a landing, came to her room, went in and bolted the door. She had no candle; that night she needed none. The boards were quite bare, the walls unpapered, the ceiling low and sloping down from the middle outwards. A box stood in the corner. By the landing wall stood her wooden bedstead, covered with a patchwork quilt. On the walls hung a dress or two, a hat or two, her Sunday jacket; on the mantelpiece were a few old photographs set in rough frames covered with varnished fir cones.

Facing the door, a small window looked upon the garden and the trees, and the

lake shining in the starlight out beyond the rim of Inishrath. Nan crossed the room, swung the window back, leaned her elbows on the frame and her face on her hands, and looked out upon the night.

Ah, how lovely it all was; not a cloud in the sky, not a breath in the trees: the first night of the new spring. What a day it had been; what a night it was; and what an ending to it all! Ah, she felt miserable, bewildered. It was all so strange. Why had Ted acted so foolishly? Why had he not waited for a while, waited and asked her quietly about everything? How had he come to think such things of her, of her and Mr. Frank? Not a word of warning had he given her, not a hint that such things were in his head. It was jealousy of course. Before long he would be sorry; would come and ask her father's forgiveness, would come and beg hers.

Suppose Ted did not come? Suppose it were all over between them? Ah, why had Ted been so foolish? Why had he spoiled the end of that lovely day? Never before had she been happier in this world; never felt before in her life as she had felt that day. Think of it all! From first to last she remembered everything, had but to close her eyes to see everything. And Ted had spoiled it all! She had done no harm, no harm. Why had he been so foolish? 'Twas jealousy. *Did he make love to ye?* That was the question.

Had Mr. Frank made love to her? Was that the meaning of the looks he had given her, the things he had said? Was Ted right? Had Mr. Frank made love to her? Had he? Why had she let him come with her? Ah, God forgive her, she was glad he had come! Think of all he had said, the stories he had told, the jokes he had made; think of the look she had seen in his eyes; think of the voice he had, the pleasant face, the pleasant ways, the long white hands, the wavy hair, the gentle manners. . . . Ah, if only she could see London; see the shops, the churches, the streets, the ladies riding about, the big river, the place where Mr. Frank sat reading, the place he lived in, those friends of his! If only she could! The day it had been, the long, wonderful day!

And Ted had spoiled it all! Oh, she had nearly hated Ted, as he stood there on the pier and in the lane; God help her, she had not forgiven him yet. Ah, she pitied him, she pitied him from her heart. . . . but something had come between them; something had come between them. What was it? Ah, she was bewildered. Might God help her to do right, to be brave, to be strong.

"Oh, God help me!" cried Nan, and bowed her head upon the window-frame; "an' God help us all, an' keep us for Christ's sake. Amen."

So in Inishrath it was, that first night of the new spring. And, across the lake, in Ryfield, even as Nan stood sobbing by her window, Frank Barry, with a portrait in his white hand, sat smoking before the parlor fire; and now he glanced at the face of his Marian and swore to be true to it, and now looked into the coals and thought fondly of black-haired Nan, and again, at thought of both, split his mighty heart between them. And upstairs, even while Frank sat dreaming, old Hugh lay staring at the ceiling, and muttering fierce things of fools and weaklings. And outside, even while Nan was weeping, Ted Ross paced to and fro over Ryfield lawn, swearing, muttering, pausing often to shake his fist at a lighted window and to pray for a quick meeting with him who sat behind it.

CHAPTER XI.

THE morning broke in glory; very early shot a sunbeam through Nan's window and woke her. For a while she lay staring at the ceiling and thinking; then rose, dressed quickly, and flinging wide the window looked out. The splendor of the sun was on the earth, his glory filled the heavens; the air was sweet and fresh; the voice of young spring was abroad. Below, Nan's garden patch lay hungering for the gentle tending of her hands; beyond the quickening hedges the fields stretched resplendent in their dew-spangled mantles of green;

away across to the woods, right and left between the hills, the lake ran skimmering and dancing; the birds were singing, the cocks crowing, a great stir of joyous life made voice beneath the sun.

Nan leaned her cheeks on her hands. Ah, the lovely morning it was. Just such another day as yesterday it would be. Yesterday? Mercy, how long ago yesterday seemed, how long ago and how different! She didn't care to feel the sunshine, to watch the lake, to hear the birds; yesterday she had cared, but to-day she did not. She was changed; the world was changed; life was changed.

Last night; last night? Was it all a dream? There was the pier; along there Ted and she had walked; there they had quarreled. And Ted was gone? And Mr. Frank?

Oh, that time among the heather; the things he had said, the way he had looked! Oh, that time coming home, the talk, the merriment! Then—then, Ted and his foolishness; Ted and his question. Was it foolishness? Was he gone for always? Ah, she pitied him; but he seemed so far away now; and between him and her was some one else.

Presently Nan went downstairs; kindled the fire, and hung on the kettle and the porridge pot. She opened the door; swept the kitchen and the hearth with a heather besom; pulled out the table and laid it with shining tins and crockery-ware, with soda bread and butter, and brown sugar in a blue and white basin. Quickly she worked, mechanically: always she kept thinking of the day before, of the night before, of Ted, and of some one who had come between Ted and her.

Upstairs, John, her father, yawned noisily; thumped out of bed and began padding heavily over the boards. Soon the roll of his voice sounded between the yawns and between the shrill snaps of her mother's answers. They were talking about her—Nan knew it—about her and her affairs. Let them talk. She filled a basin with oatmeal, set it on the hearth, pulled out the crook, and stirred the meal as it fell through her fingers into the boiling pot. *Thud, thud*, came John's feet down the stairs; in he came, made for his stool in the corner, and began pulling on his boots. Well, how was Nan feeling this lovely morning; how did she feel after last night's adventures? Faith, like a dream it all seemed to John, like one of those nightmares that take such liberties with your sleep. But how was Nan feeling this lovely morning? asked John again, and stooped to light his pipe.

"I'm as usual," answered Nan. She set the tea drawer on a coal. "I'm well enough."

"That's right," said John; "that's a girl. Because your mother an' meself were sayin' above—"

"There's not a turf in the house," said Nan quickly, "but what's on the fire. An' breakfast'll be ready inside ten minutes."

"Ay, ay." John walked to the door. "Ay, ay."

Nan stirred the porridge; brought milk from the dairy and poured it into the mugs; emptied the tea drawer into the brown teapot, and turned the porridge out upon the plates. Her hands moved quickly, deftly she worked; always she thought of Ted, and of some one who had come between Ted and her.

Sarah came down, hair tousled, face haggard, her eyes bleared; came in, without a word, poured out a cup of tea and drank it greedily. Narrowly she watched Nan over the cup-rim; shrewdly observed her paleness, her look of cheerless reserve.

"Where's your father?" said she, setting down her cup.

"Gone for a creel of turf, mother."

"Dang the turf," answered Sarah. "I wish they were in the bog this minute."

In a while John came back and sat down to breakfast. He seemed his old self again. Once or twice, between spoonfuls, he remarked on the grandeur of the morning; after his second cup of tea, he slapped his knee and broke into a guffaw; but neither Nan nor Sarah gave him a word. Sarah was watching Nan; Nan was thinking of the day before, of Ted, and of some one who had come between Ted and her.

Breakfast over, John began carrying the turf from the cot. Sarah dressed and fed old John. Nan finished the housework and, toward noon, fell to digging in her garden-patch.

The sun was hot, the air held a fine freshness, from the earth came up a sweet breath of newness and health; there were songs in all the hedges, life and gladness everywhere. Up the lane John came, groaning under his load, down he went whistling; after a while failed to come and Nan knew that he was asleep somewhere in the sun. Old John hobbled out in his beaver hat and long frieze coat; stumbled to the window sill and sat blinking at the flashes of Nan's spade. "Och, och," he would say; "och, ay." Also came Sarah and watched Nan from the doorstep. She had tidied herself and looked less shrewish; but there were knowing depths in her eyes.

Nan plied her spade vigorously, if not with her customary zest. She loved work, particularly work in this garden that she loved. The earth was so kindly, so ready to repay abundantly all toil given in its behalf. It was pleasant to see the clods break and crumble, to see the sunshine lick each spadeful, to see order drive out disorder and spring dispossess old winter; and was it not glorious, even with the mind's eye, to see the hollyhocks here and the dahlias there, that plot blazing with nasturtiums and this full of velvet-faced pansies, to see, across the back of a month or two, sweet summer in her prime and mellow autumn in her fatness?

Yes, it was glorious; but what might happen before ever a flower bloomed, ay, even before a root struck? Think of what a day had brought forth. Where was Ted? Nan wondered. What was he thinking? Would he defy her father and come? He had vowed to keep her: would he keep his vow?

Where was Mr. Frank? Nan wondered, and glanced over her shoulder toward Garvagh pier. When would he come? What would he do? Would he stay away for fear of Ted; or would he come as he had promised her father? She wanted to see Ted, to reason with him; she hoped Ted would come soon: but, ah, God help her, she hoped even against herself that Mr. Frank might come sooner. She pitied Ted; but he seemed far away, and between him and her was—was Frank.

The morning passed; the afternoon went swiftly; evening came, with its chill winds from the lake, its sweet peace, its trail of stars. By the Butlers' fireside John smoked and trimmed basket rods; Sarah knitted and pondered; old John mumbled and slept, woke and mumbled; far from the hearth, yet within range of Sarah's eye, Nan sat plying her needle, sat thinking and stitching and listening for the sound of a foot on the step. Whose foot would sound first—Ted's or Frank's? Suppose Ted came? . . . Suppose Frank came? . . .

But neither put his foot on the step that evening; not a cry came from Garvagh pier, not a rattle from Ted's oars; with Nan it was only stitch and listen, think and listen, all the evening long.

So that night went, and the next, and the next; and Nan, on the fourth night of that new spring, as she stood once more looking from her window, had but small warmth of hope at her heart. She felt old and worn. Life seemed to Nan but a weary thing, dark and very cruel. The spring had lost its charm; the days their glory; the nights their glamour. What of the days and nights, she said, when her heart was sore! She was lonely. Her mother was hard and bitter, her father strange; she could hardly speak to them. She was so lonely. Surely, in four days, Frank might—

Hush! Had some one moved in the hedge there beyond the garden? Surely some one had. Nan leaned far out; peered hard; waited almost breathlessly. Was it Frank? Was it Ted?

"Who is it?" she called softly; and again, a little louder, "Who is it?"

A twig broke in the hedge; in the half light something seemed to move.

"Who is it?" called Nan. "Who is it?"

Surely some one was crouching there behind the quicks. Was it Ted? Was it Frank?

"Is that you—Mr. Frank?" called Nan. "Is it you?"

No answer came and not a sound. Nan closed her window. It was nothing, thought she; nothing but a fancy. Ah, yes, everything was fancy now; life now was all wishing and all fancying. She knelt and asked God to bless every one; to bless her father and mother and all her friends, to bless Ted and keep him, to bless Frank and keep him—yes, Nan asked God to bless Frank Barry, who just then sat smoking in Ryfield parlor and pondering the portrait of his Marian; and to bless Ted Ross, who just then was rising from his place behind a hedge, and muttering as he rose: "She said, *Is that you, Frank? Is that you?* My God!"

In the fifth day of that new spring, late in the afternoon, a cry came to Nan, stooping in her garden patch, from Garvagh pier. It was not Frank's cry; still he might, by chance, be near the shore; she might, by chance, have sight of his face. Yes, yes! Hurriedly she ran down the lane, pushed out the cot, and started for Garvagh. *He might come*, her heart sang in time with the oars; *he might come. Who knows?* Vigorously, with something of her old gladness of heart, she swung to and fro on the thwart. *He might, he might*, she murmured. The cot neared the shore. She dared not look. *He might, he might*, she said.

The cot swung round. She lifted her eyes and there stood old Hugh Barry. The gladness died in Nan's heart. Old Hugh, thought she; not Frank, but his grim old uncle.

The cot ran up on the landing-place; without a word Hugh stepped in and stiffly sat down. His face looked mighty hard, Nan thought, mighty hard and cold. She rowed a stroke or two; then, with an effort:

"It'll be fine weather, Mr. Barry?" said she, looking at her hands.

"It is, thank God," answered Hugh. "It's the best o' weather."

"Ye'll be for the Lismahee side, Mr. Barry?"

"For Inishrath, I'll thank ye." Hugh pointed at the island with his staff. "Inishrath, I'll thank ye."

Nan looked swiftly at him. For Inishrath? And why? It was years since he last put his foot there; he disliked her father: oh, she hoped nothing was wrong. Could it be that he was coming about Frank?

"D'ye hear me?" said Hugh sharply. "I said Inishrath; an' you're makin' for the quay beyond. Pull that left oar."

Silently, but with flaming cheeks, Nan altered her course and steadily rowed on. Hugh sat peering here and there under his bushy eyebrows and tapping with his staff on the gunwale; after a while turned his eyes and looked long and steadfastly at Nan.

Ay, faith, thought he; ay, faith. So this was the jade who was making a fool of Frank. Just so. She had grown a trifle these past few years; she seemed a strong, well-boned wench; he supposed she had her share of good looks. Yes, she had. She was the kind of damsel Frank's father used to look twice at. She had good eyes in her. She had a good face. He liked the way her hair—Phat! One would think he was Frank! Fiercely Hugh smote the gunwale with his staff and looked away.

Nan rowed on; presently old Hugh looked at her again. To think that John Butler could rear a daughter like that—a fine, bouncing girl like that! And a sensible girl, too, that knew her place and could keep her tongue quiet. Why, last time he saw her she was a ragged-tailed schoolgirl with her hair in wisps. But had she any brains, any wits? That was the point. It was none of his business; still, he was curious to know what Frank saw in the wench, mighty curious.

So Hugh, sitting upright in the end of the cot, and with his hands crossed atop his staff, began plying Nan with questions; sometimes looking full at her, sometimes only sideways, always jerking out his words with that domineering manner of his, that manner which seldom failed him be his victim man or woman, Frank or Nan. He asked about the ferry, about her work,

pleasures, her time of rising and going to bed, her way of spending Sunday, her views of this and that — butter-making, calf-rearing, and the rest: and to all Nan replied briefly, sensibly, replied with pleasure even, for was not this Frank's uncle, and, besides that, for all his uncouthness, was there not something in the old man she liked well? He was a fine, hardy old fellow, and his eyes were honest, and his voice; she liked to answer his questions, even though some of them made her blush and bite her lip. But why was he questioning her? Nan asked herself after a while, just, indeed, as she dropped an oar to turn for Inishrath pier. She looked at him, the question kindling on her face; and there old Hugh sat peering at her across his hands, peering steadily, with something like admiration shining in his eyes.

"Just so," said he; "oh, just so. Well, it could be worse. Ay, it could."

"What could, Mr. Barry?"

Hugh waved a hand; slowly rose.

"Nothin'," answered he. "It's only a way ould people have o' talkin' nonsense to themselves. Just that; just that."

With his head back, and his eyes, now this side, now that, flashing scorn on the nakedness of John's domain, old Hugh, with Nan at his elbow, tramped up the lane, passed through the green gate, stamped along the narrow walk, and coming to the Butlers' front door smote it twice with the end of his staff.

"Is that your work?" said he, turning and pointing at Nan's garden.

"It is, Mr. Barry."

"H'm!" grunted Hugh. "Your father didn't help ye, I warrant?"

"Aw, no, sir; aw, no. Sure father doesn't bother about trifles like that."

"H'm!" grunted Hugh again; then, the door opening, turned to Sarah Butler as she stood with one hand on the latch and the other fumbling in her dirty apron. "Good-evenin' to ye, Mrs. Butler," said Hugh. He stepped into the hall. "I hope I see ye well, ma'am?"

Aw, now; Sarah was finely, thank God. And how was Mr. Barry himself? But wouldn't Mr. Barry be stepping into the wee room, now?

"The kitchen'll do for me, ma'am, I thank ye," said Hugh; then turned through the passage door and came upon John sitting in his shirt-sleeves over his tea, and old John fast asleep beside the fire.

"Good-evenin', John Butler. Now don't stir, I ask ye. Just finish your meal an' never mind me. I'm obliged to ye, ma'am," said Hugh as Sarah wiped a chair and set it for him by the hearth. "No, no, John," he said again, and refused the offer of a cup of tea. "No, no; I'll wait till you're done an' then have a word with ye."

With his hands crossed on the knob of his staff, his hat on his knee, and his eyes on the fire, Hugh sat stolidly and silently waiting. Now and again John turned and, his saucer poised, made a remark about the fine weather and the early spring; and Hugh only grunted in response. Beyond the table, Sarah, her face flushed and curiosity flaming in her eyes, looked hard and not lovingly at Hugh, and now questioningly at Nan, and now meaningly at John. Nan, seated at the end of the table, ate soberly and but seldom raised her eyes. What the sorrow now? thought John, with a glance at Sarah. What in glory now? thought Sarah, with a look at Hugh and a glance at Nan. Is it about Frank? thought Nan. A cloud, so to speak, heavy with restraint, with foreboding and excitement, hung over the table; a cloud whose skirts went trailing for Hugh's white head.

Presently John set down his empty cup, wiped his mouth on his sleeve, and turned his chair.

"Now, Mr. Barry," said he, pulling out his pipe, "now I'll do till supper time. Faith, an' bad manners to me keepin' ye there this long. But you'll know," said John with a hollow laugh, "sacks an' stomachs were made to be filled. Ay, indeed."

Hugh rose.

"I want a word with ye, Butler."

"Why, of course," said John; "of course, Mr. Barry. Set the chairs in the wee room, Nan, an' get out the glasses."

"Ye needn't bother." Hugh made for the door. "Outside'll do well enough. Good-day to ye, ma'am," he said to Sarah. "An' to you, me girl," he said to Nan, "an' good luck be with ye."

"Aw, good-evenin' to ye, Mr. Barry," answered Sarah. "An' thank ye kindly for your visit. An'," cried Sarah, as the door closed, "may your mannerless carcass niver sit in this house again. Phew, it's fair chokin' I am. What in glory's up? What did he say to ye, Nan, comin' across? Come, none o' your humors, miss; but. . . ."

Hugh and John crossed the yard toward the fields. John's face was solemn; one hand gripped his pipe stem, the other swung limply to and fro. Hugh, looking here and there and thumping his staff upon the stones, strode grimly on; at the lane he turned.

"It's a wonder ye couldn't find time, John Butler, to put a nail in that," he said, pointing at the broken gate. "It's a wonder ye couldn't take a shovel in your hand and clear some o' the muck off that yard. Eh?"

"Ay." John cocked his head. "Well, mebbe it is a wonder."

"If ye had as much top-dressin' on this field," Hugh went on, wheeling about, "as ye have in sight o' your doorstep it'd be better for you an' it. Man, what kind are ye? Ha' ye no bowels in ye? To let good land get into such a state! Look at it; as poor as the side of a mountain. Ha' ye no shame?"

"I'm choke full o' shame," answered John. "I give ye me word, Mr. Barry, but I'm 'shamed to dirty me boots on it."

"It'd disgrace a Connaught man," cried Hugh. "Look at the bare ribs of it; an' the physicked look it has; an' as much grass on it as there's wool on a skinned sheep. Grass? A goat would sniff at it."

"If so be there was a decent hedge handy," said John, "dang me, but the goat'd be right."

"You're scoffin', sir," said Hugh, turning up hill; "you're scoffin', sir. Look at it! A wilderness; a wilderness. Why don't ye stir yourself, sir?" shouted Hugh, swinging round. "Why don't ye dig, an' manure, an' plow; why don't ye get into the plow yourself an' drag it?"

"Ay," answered John, "I misdoubt the sight o' meself in a plow'd make the asses wag their tails."

"There's not a man in the country," Hugh kept on, "that has half your chances or makes a sorrier use of them. Bah! I have no patience with ye; no patience at all."

"Aw, no," said John. A smile broadened on his face; meekly he trudged along. He was used to talk like that; it never broke a bone in him; if Hugh had no worse than that to say he might keep on till kingdom come.

Again Hugh turned.

"There's your daughter is worth two dozen of ye," said he, pointing down hill with his staff. He walked on a step. "It's a wonder ye wouldn't let some one better than you take care of her."

"Ay, it is, Mr. Barry. Sure, it is a wonder."

Hugh took another step; stopped again.

"It's time ye were marryin' her," he said. John looked across the fields.

"Ay," said he; "mebbe it is. But it's a free country, Mr. Barry, an' it's not for me to tell the girl what she's to do. If she marries a decent man, then God bless her; if she sees us to the churchyard, God bless her for that; for she's a good girl."

Hugh looked hard at John, grunted and turned. This Butler was a slippery fellow. Again said he:

"Mr. Frank, my nephew, is occasionally in Inishrath, I believe?"

"An odd time."

"What does he come for?"

"He niver said, Mr. Barry; an' I niver asked him."

"What does he do here?"

"Aw, he talks, and smokes an' laughs, an'—Aw, just makes himself at home."

"I know." Hugh paused for a breath. "Well, I want this to stop, Butler; I want you to stop it. I want ye to tell Mr. Frank that he must quit making these visits; in fact, I want ye to forbid him your house."

John looked steadily at Hugh.

"Forbid Mr. Frank the house?"

"Yes; I wish it."

"An' why, Mr. Barry, may I ask?"

Hugh waved his hand.

"There are many reasons. He's wanted at Ryfield. I see too little of him. He didn't come to Ireland to go scooting all over the country. He has work to do. Chut! Never mind reasons. I simply wish what I say."

"Ay," said John, "Ay? Well, I'll give him your wishes, Mr. Barry, first time I see him."

"You'll do what I say, Butler; you'll forbid him your house."

John looked at the grass; fell to rubbing his chin with finger and thumb.

"No," said he; "no. I can't do that."

"Can't? You must."

"So long as Mr. Frank chooses to look at my fire," John went on, "he's welcim. You can tell him what ye like, Mr. Barry; but I'll not say it. I never shut me dure in the face of a Barry yet; an' please God, I never will."

"If ye don't," shouted Hugh. "If ye don't—What! Ye take his part against me?"

"I take no part or parts, Mr. Barry. I just know this: Last time I seen Mr. Frank I gave him word that so long as there was a coal on the hearth he'd be welcim to warm himself at it. An' to that I stand. Yes. I'm sorry."

"Sorry!" shouted Hugh. "Keep your sorrow. Here, let me out of this. It's what I might have expected. But let me tell ye, John Butler," cried Hugh, turning on the hillside, "if by any chance what you're wishin' an' he's playin' the fool for should come to pass—Whoo! Let me out of this," cried Hugh; then started toward the lake. But John caught him by the arm.

"Finish your speech, Mr. Barry," said he. "I'm bad at riddles."

For a moment, Hugh hung on his heel, peering the while over his shoulder into John's eyes; then snorted and strode off.

"Ay," said he with a laugh; "I can see ye are. All the wits belongin' to ye has run to the petticoats."

"I know," answered John. "For all that I'd thank ye to finish your speech."

"I'd thank ye to ferry me to Garvagh," Hugh answered, "an' to say no more."

So John ferried Hugh to Garvagh; and all the way over no word was spoken. Hugh sat with drawn brows, glowering right and left; John with puzzled eyes that occasionally sought Hugh's face. The cot swung round; took the pier; up rose Hugh.

"I'm obliged to ye," said he.

"Aw, don't mention it, Mr. Barry," answered John. "Sure the obligement's with me. Good-day to ye, sir; an' good luck."

Hugh did not answer. Noisily he tramped up the pier; came to the edge of the oak plantation and there met Frank his nephew. He drew one side as if to pass; suddenly stepped in front of Frank and looked him in the eyes.

"Is it for Inishrath ye are this fine evenin'?" said he.

"Well—perhaps, uncle—perhaps."

"Then hurry yourself," said Hugh, and pointing toward the lake stepped aside. "Don't let me keep ye from makin' a fool o' yourself. Hurry yourself, I say, or the cot'll be gone."

And before Frank could fashion an answer, his uncle had passed into the dusk of the plantation.

(To be continued.)

LIQUEFIED GASES AND AIR IN THE INDUSTRIES.

BY ERNESTO MANCINI.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE ITALIAN "NUOVA ANTOLOGIA."

A LITTLE more than a century ago a Dutch physicist, without intending to do so and without realizing the importance of his own discovery, succeeded in liquefying gas by compressing it. This fact was then generalized with marvelous intuition by Lavoisier, who distinctly affirmed that the solid, liquid, or gaseous states of matter are nothing but the results of temperature, and that the air even could be transformed into a liquid and in its turn give rise to other liquids heretofore unknown. The liquefying of air and of hydrogen, which have recently been accomplished, have changed the previsions of the great innovator and founder of chemistry into realities. With the disappearance of those gases that were thought to be permanent, science has finally traversed to its end the way which was laid down for it. Though buffeted often by difficulties which seemed insurmountable, and yet which yielded one after the other to the tenacity of the human mind, it has held its course with ever-increasing rapidity. The liquefying of air represents only one episode in a long struggle, a struggle which deserves to be known in its complexity, and the consequences of which, after having furnished science with the means of searching into new phenomena and investigating new laws, hands over to industry most important practical applications. For all modern progress has a twofold characteristic always, the theoretical and the materially useful.

The ignorance of the ancients in regard to the existence of gases, and also their partial ignorance in respect to air, did not diminish until the middle of the seventeenth century, when Mariotte and Boyle succeeded in demonstrating by independent experiments, which were made known at the same time, that the earth is surrounded by a heavy elastic fluid, compressible in such a way as to diminish in volume proportionately to the pressure which is exerted on the air itself. While Pascal, by recording the variations according to altitude, was giving evident proofs of the variations of the air in weight, Otto von Guericke was showing to an astonished audience at Magdeburg how powerful such a pressure was. His was the famous experiment in which sixteen horses tried in vain to pull two hemispheres apart between which a vacuum had been created. These researches occasioned all the more wonder because they were carried on at a time when chemistry was still entangled with alchemy and the marvels of physics and electricity had not yet been noted.

It was a Dutch physicist, as we have already said, Von Marum by name, who saw ammonium gas, as he was trying to find out whether it obeyed Mariotte's and Boyle's law or not, change into a transparent liquid when he subjected it to a pressure of six atmospheres. This discovery was considered as a mere curiosity notwithstanding Lavoisier's statements. In 1799 Guyton de Morveau, Clouet, and Hachette also liquefied ammonia by subjecting the gas to a temperature of about forty-eight degrees below zero Centigrade. But they were uncertain regarding the result obtained. Shortly after Monge and Clouet succeeded in liquefying sulphuric gas at a low temperature. Then Faraday followed by obtaining a liquid from chlorine in subjecting it to a high temperature. This method was quite dangerous, since it involved sealing up the gas in glass tubes and subjecting it to enormous pressures, but it succeeded in arriving at the liquid forms of some dozen gases among which were carbonic and sulphuric acid. Many gases resisting this method Faraday had recourse to the idea of low temperatures, which accomplished the de-

sired results in numerous instances. But illuminating gas, swamp gas, carbon oxide, oxygen, nitrogen, and hydrogen resisted all attempts, and on account of their unconquered nature received the name of permanent gases.

Still, various experimenters were not convinced of this "permanence" and continued the struggle. Manometers full of air were sunk into the ocean to a depth where the pressure corresponded to four hundred atmospheres, but no signs of a liquid were obtained. Berthollet succeeded in placing seven hundred and eighty atmospheres on some oxygen shut up in a tube by an ingenious device. But at that point the tube burst and no liquid appeared. Another experiment was tried where the pressure reached one thousand atmospheres, but to no purpose. Natterer, a physicist of Vienna, subjected hydrogen and nitrogen to a pressure of thirty-six hundred atmospheres, a weight which would balance the weight of a column of water thirty-seven kilometers in height, yet the gases did not liquefy. And the interesting part of this experiment was that nitrogen under this tremendous pressure attained a density greater than that of water, while, as was verified later on, liquid nitrogen is much lighter than water.

All these fruitless attempts had proved that at ordinary temperatures pressure alone was not sufficient to liquefy the permanent gases. So the physicists were driven to consider the part that temperature would play in the matter. Andrews undertook a series of experiments which led to the result that the liquefying of a given gas goes on less and less rapidly with rising temperature until a point is reached beyond which the gas can no longer assume the liquid form. Cagniard-Latour verified this position by watching the changes in ether enclosed in a tube and subjected to high and low temperatures. He soon found a point where by slight variations in temperature the ether became liquid or changed back to gas. The secret of the permanent gases was thus revealed. To liquefy them pressure alone was ineffectual. It was indispensable to lower their temperature below a given point. With all the means at his disposal Faraday had not been able to do this.

Guided by these considerations Cailletet and Pictet thought that they could obtain lower temperatures by making use of the consumption of heat which is demanded by a compressed gas when it is allowed to expand suddenly. It is well known that such a process takes place in the matter of carbonic acid gas which has been compressed. It falls under the form of a white snow. In 1877 Cailletet compressed oxygen in a strong glass tube, to the extent of three hundred atmospheres, by keeping it at twenty-nine degrees below zero Centigrade. The tube was suddenly opened, the temperature of the gas fell by two hundred degrees or more on account of the expansion and it formed into a cloud of liquefied oxygen. Twenty days later Pictet reached a like result by compressing oxygen under three hundred and twenty atmospheres and then lowering its temperature to one hundred and forty degrees below zero, by means of liquid carbonic acid evaporated in a vacuum.

These two experimenters were not able to enjoy the reward of their labors in extending the tests to liquefied gases other than carbonic acid, for two Polish scientists, Wroblewski and Alzewski, who learned of Cailletet's experiments and who possessed the proper apparatus, managed to precede both him and Pictet in this direction. By making use of liquid ethylene placed in a vacuum, where it reaches a temperature of one hundred and fifty degrees below zero, the compressed oxygen was changed into a bluish liquid less dense than water, which boiled at one hundred and eighty-five degrees below zero. Shortly afterward the same physicists obtained liquefied nitrogen by a pressure of one hundred and thirty-six atmospheres and a temperature of one hundred and forty-six below. The experiments with ethylene were long, difficult, and costly. Cailletet in 1883 substituted for it a carbureted hydrogen which escapes from marshes which aided very much in liquefying the two elements of which our air is

composed. Ozone after oxygen was converted into an azure liquid, and argon soon after its discovery underwent the same change, giving a liquid which boiled at about one hundred and eighty-seven degrees below zero, and solidified into white crystals which melted at a temperature of a little more than one hundred and eighty-nine below.

It seemed then that in following out this new way one might easily attain the liquefaction of the last gas which had resisted up to that time, that is to say hydrogen, precisely because nitrogen and oxygen could give very low temperatures whenever they were made to boil in a vacuum. We know, in fact, that water boils at decreasingly lower temperatures in proportion as the pressure to which it is subjected diminishes. In a vacuum water rapidly enters into the boiling state and the consumption of heat is such that it freezes. Another thing to be noted is that while a liquid is boiling its temperature remains constant, even if that of the ambient is much higher. Such an excess of heat is wholly consumed in the process of boiling and in the relative formation of vapors. Precisely for this reason or property liquefied gases can maintain their liquid form for a certain time even when exposed to the air, for instance in the case of liquids which are found in a medium warmer than they are. As we have seen, the temperature of a liquefied gas is quite low. But, like water, it becomes lower when the vacuum over the gas becomes more and more perfect. Liquefied carbonic acid gas boils gently at seventy-eight degrees below zero, and it is the heat of the ambient and the surrounding objects which is consumed in the formation of its vapors. Thus we understand why water and mercury suddenly freeze when immersed in liquefied gases. So we see that the common idea of the boiling-point is somewhat modified. We can go from liquids which, like ethylic ether, boil at thirty-six below to those that boil at the temperature of melting ice, as methylamine, or to the protoxid of liquefied nitrogen, which boils at eighty below, under the ordinary pressure, to descend to one hundred and ten, when the ebullition takes place in a vacuum. Nevertheless in spite of the low temperatures which can be obtained from liquefied oxygen and nitrogen, we have only recently succeeded in completely and safely liquefying hydrogen, thanks to the perfections arrived at in the methods of liquefying air. These methods, perfected by scientists both in Europe and America, consist in accumulating the results of an expansion of air compressed to a hundred and twenty atmospheres and more, an expansion produced in a continuous manner.

Liquefied air presents itself as a transparent liquid of an azure like that of a limpid sky, a color which is due to the hue of the oxygen, since nitrogen is perfectly colorless. At first the liquid seems slightly muddy because it contains particles of carbonic acid gas and ice. But it is easy to free it of these impurities by filtering it like any ordinary liquid. As the evaporation continues the color of the liquid deepens, because the boiling-point of nitrogen is lower than that of oxygen; consequently the nitrogen separates from the mixture and the oxygen remains. Finally the liquid becomes almost pure oxygen. It seems paradoxical that liquefied air should be collected in open receptacles and not in closed ones. The reason for this is that it can be kept in a heated ambient for a time, just as water is kept. The heat of the ambient is used up in the formation of vapors on the surface of the liquid, which is steadily maintained at the boiling-point. It takes eight to ten hours for twelve liters of liquid air to evaporate completely. Vessels made out of substances which are bad conductors of heat are chosen for holding liquefied air, especially since its boiling-point is one hundred and ninety-one degrees below zero. In an ordinary glass receptacle the evaporation would be very rapid, and the exterior of the vessel would at once be covered with a crust of ice. Various materials have been used, but the best so far found is a vessel of glass with double walls separated by a vacuum which is as perfect as possible. Thus one wall is hardly a conductor at all. It has been found that in such a vessel the

liquid heats or cools off from twenty to twenty-five times less rapidly than in the air. The vapors thrown off by liquefied air are heavy and appear like dense clouds. The constant formation of such vapors gives them a force, the potentiality of which is easy to calculate, when we reflect that the volume to which liquid air is reduced is about seven hundred and fifty times less than that which it would assume in a gaseous state. It is therefore impossible to keep liquid air shut up in closed vessels however strong they may be.

Liquid air, like the liquefied gases, has been of use in scientific investigations only when it has been collected into the proper receptacles and used like an ordinary liquid. In this way we have been able to test the magnetism of liquid oxygen. In the atmosphere it is twenty-six hundred times less active than that of iron, but condensed into the liquefied gas it has revealed a greater energy even than iron compared to its mass. Dewar showed by an experiment that the current had no sooner passed through liquid oxygen placed in a capsule between the two poles of an electro-magnet, when it rose in the capsule and went to attach itself to the two poles. This proves not only the magnetic qualities of oxygen but also assures us that such qualities pass from the gaseous into the liquid state. So Dewar and Heming, by making use of liquid oxygen, were able to prove that at the temperature which is theoretically called absolute zero, metals should become perfect conductors of the electric current, without any part of them being transformed into heat. By means of liquid air we are able to study the properties of matter in proximity to this absolute zero. For instance, it is seen that intense cold changes the color of different substances, so much so that the iodine of mercury becomes yellow. It therefore must modify the absorption of luminous radiations in bodies subjected to low temperatures.

With the fumes or vapors of liquid air we can solidify quite fragile bodies, like soap bubbles which become solid the moment the iridescence appears, so as to make them preserve all the colors of the rainbow. Organic substances also lend themselves to curious and interesting researches when cooled by liquid air, while on the other hand it is found that the most powerful chemical affinities are destroyed by low temperatures. Copper and platinum immersed in liquid air are still malleable, but iron and steel become brittle. Balls made of lead or tin, reduced to a temperature of one hundred and eighty-two below zero, bound back from hard bodies as though endowed with an extraordinary elasticity. Liquid air may have a great importance in medicine, since we can obtain from it an air that is perfectly pure of germs and rich in oxygen.

But one of the most important consequences of liquefying air has been in furnishing a means of obtaining the liquefaction of hydrogen. Last May Dewar succeeded for the first time in liquefying this gas in such quantities that he could present a beaker of it to Lord Rayleigh. This liquid is colorless and has a density which is six tenths that of water. When it evaporates a kind of cloud appears in it formed of solid air which falls to the bottom of the vessel. This evaporates in its turn so soon as the liquid hydrogen has disappeared. A tuft of cotton steeped in liquid hydrogen seems to be magnetized. But such a property depends on the congelation of air going on on its surface. If you immerse an empty aerometer in liquefied hydrogen its lower part is seen to be filled quickly with solidified air. In the same way liquid oxygen may be changed into solid azure. And so it is that while sixty years were required from the first liquefaction of chlorine to the liquefaction of air, the progress of science has been able to reduce the interval between the latter process and the liquefying of hydrogen to but fifteen years.

In industries also the liquefaction of gases is destined to give rise to numerous applications, some of which are already in use. Refrigerating machines take advantage precisely of a fall in temperature which is produced by the evaporation of a liquefied

gas. This gas is used over and over again by being repeatedly compressed and liquefied. With ice machines ammonia is used, or nitrogenous ether, or sulphuric acid. The principle on which the process rests is to heat up a receptacle where the solution of the gas is, and to conduct the liberated gas into another vessel, where it is compressed and liquefied. Then the first receptacle is cooled off and the liquefied gas of the second enters into ebullition on account of the diminished pressure and congeals the liquid that is about it. An application of liquid air that is truly industrial and practical is one that is employed in simplifying the manufacture of chlorine. The product of this manufacture is increased by means of the oxygen contained in the liquid air, and liquid chlorine is obtained by means of a low temperature, without resorting to compression. In the same way the low temperature of liquefied air can be made of industrial use in the purifying of alcohol, chloroform, ether, and so on; while by allowing the air to evaporate and releasing the nitrogen we shall have an economical method of preparing oxygen.

Since liquid air has the property also of enriching itself in oxygen, it is probable that it can be employed in making an explosive of very high power. If, in fact, we allow it to evaporate until it contains forty or fifty per cent of oxygen and then mix it with pulverized carbon and explode the mixture in the same way as we do dynamite, we obtain dynamic phenomena of an extraordinary potentiality. Let us also notice that the production of oxygen at a small cost by means of liquid air will enable us to complete certain industrial operations, as the preparation of the carburet of calcium, more cheaply than it is now produced, and so liquid air will serve the double purpose of employing the lowest and the highest temperatures that are known.

Elihu Thomson has also conceived the idea of cooling off eléctric canalizations by means of liquid air, thus reducing their resistance to the passage of the currents, and therefore diminishing the losses in these currents. Still such an application seems unpractical in reality. On the other hand, there is a strong probability that liquid air may be used in tempering metals, a process which we know not only depends on the temperature of the metal and its bath, but also on the rapidity with which the metal cools off afterward. By immersing steel which has been raised to a high temperature in air liquefied at one hundred and eighty-two degrees below zero we can easily see that peculiar properties may be obtained in the metal so tempered. Finally, there are some people who are already looking toward extraordinary applications of liquefied gases in the propulsion of balloons and submarine vessels, a constant supply of pure air being also thus assured to the latter. Such applications would be of greater importance than those of electricity, nor can they be deemed lacking in a reasonable basis when we think of the enormous quantity of energy accumulated in liquefied gases, an energy which in a single kilogram of liquid hydrogen and in a volume not greater than two cubic decimeters represents a force equal to fifty-four horse-power per hour.

HISTORY AS IT IS MADE.*

Peace Treaty and Expansion Policy. The treaty of peace, terms of which had been accurately forecasted in press reports from Paris, was submitted to the Senate of the United States for ratification immediately after the holiday recess. The joint commissioners had provided that this treaty should require ratification on the part of Spain by the queen, and not by the Cortes or Spanish parliament. But for ratification on the part of the United States, a two thirds vote of the Senate is necessary. Opposition to the ratification of the treaty as it was formulated took the form of the contention that under the federal constitution the power to annex territory was conferred under the clause permitting the admission of new states, and it was declared that it would be an un-American policy to take territory such as the Philippine archipelago to hold and govern as a colony, with no intention of ultimately granting the people the rights of statehood. On the other hand, however, the claim was made that the United States is a nation having all the powers of any sovereign; that it had repeatedly exercised sovereign power in making all sorts of additions to national territory, and that it could govern such acquisitions as it saw fit. Both contentions were supported by references to various decisions of the Supreme Court and the record of our territorial acquisitions since the original thirteen states passed the Ordinance of 1787 for the government of the Northwest Territory. This discussion involved the issue of a strict against a liberal interpretation of the provisions of the constitution, as well as the wisdom of governmental policy. The increase of the regular army—two bills providing for an army of 100,000 men and a minority bill fixing the limit at 30,000 (plus 50,000 volunteers for colonial service) are before Congress—the enlargement of the navy, the increase of taxes needed to meet enlarged expenditures, the subsidies proposed for upbuilding a merchant marine, the application of navigation laws and the adoption of tariff schedules to new possessions, and the possible advantages of increased influence and trade in the Orient, are among the subjects most prominent in the current discussion of national policy.

MAJ.-GEN. WILLIAM LUDLOW.
Military Governor of Havana.

Governing New Possessions. Meanwhile, the administration has taken measures to control affairs in all the territory for which we have assumed responsibility as a result of the war with Spain. Gen. Guy V. Henry, military governor of Puerto Rico, has ably conducted military government there since the middle of October. The Spanish authorities formally evacuated Cuba on the 1st of January, and Maj.-Gen. John R. Brooke became military governor of the island. For occupation purposes, the island has been made a separate military division, and each of the provinces has a commander under the military governor. Gen. Fitzhugh Lee commands the troops in the province of Havana, Gen. Leonard Wood is retained in command at Santiago, Gen. Simon Snyder commands

* This department, together with the book "Europe in the Nineteenth Century," constitutes the special C. L. S. C. course Current History, for the reading of which a seal is given.

MAJ.-GEN. ELWELL S. OTIS.
Military Governor of the Philippines.

the province of Santa Clara, Gen. L. H. Carpenter the province of Puerto Principe, and Gen. G. W. Davis the province of Pinar del Rio. In the city of Havana civil administration has been placed in the hands of Gen. William Ludlow. The same general plan of government has been promulgated for the Philippines. Gen. Elwell S. Otis is made military governor, with headquarters at Manila, and Gen. Henry W. Lawton has been appointed as the head of civil administration in the city of Manila.

By the terms of the protocol Puerto Rico was ceded to the United States, and is treated as our property. Spain, however, does not cede Cuba to us. She relinquishes sovereignty; and by the joint resolutions demanding such relinquishment we are obliged to aid Cuba to establish a government for herself. In both cases special tariff regulations have been extended by the administration, and rates of converting currency have been established. To Puerto Rico our navigation laws have been extended. The tariff schedule for Cuba is about sixty per cent of the old Spanish rates. No disturbance whatever is reported from Puerto Rico, the inhabitants presumably accepting it as a settled fact that the island has virtually become a part of the territory of the United States. The situation in Cuba, however, is different, and admits of friction and the cultivation of doubt as to whether the United States government will keep faith with its own pledges concerning Cuban independence. There are elements in Cuba which have declared their preference for permanent rule by the United States and ultimate annexation. There is very good authority for the opinion that the attitude of Cubans toward the United States has been greatly misrepresented in press dispatches. For instance, General Gomez was represented as declaring that the Cuban army must keep under arms during the United States' interregnum, and that he and many other Cubans were disgruntled because they were not permitted to celebrate Evacuation Day in the city of Havana. General Gomez' proclamation, however, shows that he supports the United States' rule as a friendly one; that he thinks the Cuban army ought not to be disbanded without some pay for their services to the Cuban nation; and that with other leading Cubans who rejoiced over the departure of the Spanish authorities, he recognized the wisdom of not appearing in Havana and of postponing a demonstration until a more

MAJ.-GEN. HENRY W. LAWTON.
Military Governor of Manila.

safe occasion. Gen. Calixto Garcia, who commanded the Cuban army of the east and cooperated with the American forces at Santiago (with credit from General Miles), came on to Washington at the head of a commission to confer with the administration, only to succumb to a fatal attack of pneumonia on December 11. Of the famous group of Cuban patriots, Marti, Maceo, Garcia, and Gomez, only the last-named survives to enjoy the fruits of liberation from Spanish rule.

The situation in the Philippines has been less satisfactory. While negotiations at Paris for the cession of these islands was in progress, and the debate at home regarding our demands and policy proceeded, the insurgents, under the leadership of Aguinaldo, used the opportunity to strengthen their position and claims for recognition as an independent government. They succeeded in getting possession of Iloilo, the second city of importance in the archipelago. The cabinet of leaders reorganized and proclaimed their purpose of maintaining independence, even against the United States forces. Allowing for possible misrepresentation in press dispatches, it would appear that Aguinaldo is placing the same kind of estimate on promises from this government that he placed on those of Spain, with which he has had dealings heretofore, and inasmuch as he was not proof against making a sharp bargain to his own advantage with Spain, his standing is subject to question in this crisis. General Merritt left Manila and reported at Paris that the insurgents were friendly. Agoncillo, a representative of the Filipinos, made the same journey, and has been frequently quoted of late in support of the claim for independence. Both navy and army reinforcements have been ordered to Manila by our government, and General Otis has issued a proclamation similar to those which were made in Puerto Rico and Cuba, setting forth the purposes of the United States in the government of the new territory.

THE LATE GEN. CALIXTO GARCIA.

McKinley's Southern Trip.

A striking exhibition of the effect of the war on home affairs was afforded by President McKinley's tour of southern cities and military camps. In Atlanta, whither the president went to take part in a "Peace Jubilee," he emphasized the fact that a united country had won the victory over a common foe, and said to the Georgia legislature:

> Every soldier's grave made during our unfortunate Civil War is a tribute to American valor. And while, when those graves were made, we differed widely about the future of this government, the differences were long ago settled by the arbitrament of arms, and the time has now come, in the evolution of sentiment and feeling under the providence of God, when, in the spirit of fraternity, we should share with you in the care of the graves of the Confederate soldiers.

This suggestion, happily received throughout the country as coming from a Union veteran and a Republican president, was followed by some investigation regarding the number of graves to be cared for, and discussion of admitting Confederate veterans to national soldiers' homes and adding names to the pension roll. The president spent seven days in the Southern States. He spoke in Montgomery, Ala., where the

ETHAN ALLEN HITCHCOCK.
Secretary of the Interior.

first congress of the Confederacy was held. He visited the Tuskegee Institute and gave his indorsement to the development of the negro race through industrial education along the lines practiced there and advocated by its head, Booker T. Washington. At Macon, Ga., he wore a Confederate badge upon the urgent request of an enthusiast. Before the trip was finished, the president gave utterance to sentiments which indicated his opinion that the duty to humanity which caused this government to take up Cuba's cause sent Dewey and Merritt to the Philippines, where the same duty to humanity calls us to have the courage to stay.

After the War. Following the war, too, comes the decision of the government of the United States to raise the flag over Wake Island, near the Marshall group in the Pacific, about 2,000 miles west of the Hawaiian group and 1,300 miles east of Guam. Guam is ceded to us by the peace treaty, and on the way thither Captain Taussig of the *Bennington* is to take possession of Wake Island for a cable station. It is but three miles long, but it lies in line for a cable to the Philippines *via* Hawaii. The Nicaragua Canal project is another subject before Congress and the people as a national necessity. A competent commission has recommended a low-level route, known as the Lull route, in preference to the route chosen for the Menocal concession, upon which Senator Morgan's bill (now before the Senate) is based. Two of the commissioners estimate the cost at $123,000,000 for the low-level and $124,000,000 for the high-level canal. The third commissioner agrees as to the feasibility of construction, but would add twenty per cent to the estimated cost. Opinion in London and Washington is reported as satisfied that Great Britain and the United States can find a way to dispose of the prohibition against United States control contained in the Clayton-Bulwer treaty. Canal complications with Central American states still persist. Since the war has brought us new possessions, it may also be noted that the Republican House of Representatives has seen fit to defeat the Lodge Bill for restricting immigration (reading and writing test), which had passed the Senate at the previous session, and embodied one of the planks of the St. Louis platform.

"The Father of the Senate." An unprecedented record of national service was made by the late Justin S. Morrill, popularly known

THE LATE MATIAS ROMERO.

as "the Father of the Senate." Nor was this title merely nominal, covering the fact that he was the senior member of the upper branch of the legislature, for it was used to express esteem on the part of his co-members. Not only was he the oldest member of the Senate, but he had served longer than any other member of it—a period of almost thirty-two years—and he had been elevated to that body after a service of thirteen years in the House of Representatives. Thus his record of continuous membership of the national legislature covered a period of nearly forty-four years, and, oddly enough in retrospect, he had been elected congressman from Vermont at the age of forty-four. As the projector of the "Morrill Tariff" of 1861, Mr. Morrill's name became associated with the economic and fiscal policy of the government, and latterly as chairman of the Senate Committee on Finance he has had great influence in shaping legislation. He opposed inflation, free silver, and annexation policies. To his credit are placed the agricultural college system, the national hall of statuary, the war, state, and navy building, and the advocacy of a building for the United States Supreme Court. His death, December 27, will result in numerous changes of heads of important Senate committees, to which length of service in the upper branch entitles members. The advantage of the policy of returning a useful member, pursued by the small state of Vermont, does not escape comment at this juncture. The governor of Vermont has appointed Jonathan Ross, chief justice of the State Supreme Court, to fulfil the unexpired term of Senator Morrill, ending in 1903.

A New Secretary of the Interior. By the resignation of Cornelius N. Bliss, of New York, as secretary of the interior and the appointment of Ethan Allen Hitchcock, of Missouri, to succeed him, President McKinley's cabinet contains but half of the persons originally composing it. John Sherman, secretary of state, was succeeded by William R. Day, who has been succeeded by John Hay. Charles Emory Smith has taken James A. Gary's place as postmaster-general. John W. Griggs succeeded Joseph McKenna as attorney-general. Secretaries Gage of the Treasury, Alger of War, Long of the Navy, and Wilson of Agriculture have retained their portfolios. Mr. Hitchcock, a great-grand-son of Ethan Allen, was born in Alabama, and became identified with business interests which at one time took him to China for a dozen years. President McKinley appointed him ambassador to Russia in 1897, from which post he is brought to the president's council in Washington.

KING CARLOS I., OF PORTUGAL.

The Mexican Embassy. It is considered a recognition of the growing importance of Washington as a diplomatic post that Mexico has followed the example of Great Britain, Italy, Germany, France, and Russia in advancing the Mexican mission to the rank of an embassy. Unfortunately Don Matias Romero, minister from 1863 to 1868, and again after 1882, lived but a few weeks beyond the date of the raising of his rank, and died before the ceremonials of recognition of an ambassador were performed. Señor Romero is said to have been the best

known member of the diplomatic corps in Washington, and was eminent as a Mexican statesman and writer. In 1855, at the age of eighteen, he entered the foreign office in

JUTARO KOMURA.
Japanese Minister to the United States.

the city of Mexico, and four years later he became first secretary of the Mexican legation in Washington. At intervals he served his own country as chief of staff, postmaster-general, and three times as secretary of the treasury.

Foreign Friction. Tension between England and France over the Fashoda affair subsided only to give way to friction in other quarters, notably over fishing rights on the shores of Newfoundland claimed by France. The British possess the land, but treaties give the French fishing privileges; long-standing disputes between the fishermen have been the subject of inquiry by a royal commission, and utterances by British ministers are threatening.

Difficulties over the use of the Norwegian army under the dual monarchy disturb the relations of Sweden and Norway. Sweden contends for a minimum military force, which, together with the navies of both countries, shall be at command of King Oscar. Norway fears a Swedish *coup d'état* and opposes the use of Norwegian troops beyond its borders without the consent of its Storthing, in the face of the Swedish demand for observance of a guarantee, by which only troops of the line are to be taken across the Norwegian frontier.

In Austria-Hungary, another dual empire, commercial and financial interests are at variance, and sessions of the Hungarian Reichstag have been turbulent. Emperor Francis Joseph of Austria, whose semi-centennial anniversary as ruler has just passed, has been able hitherto to compromise differences. To the general situation is added an element of friction with the German Empire. Slavs overflowing into the empire have been subject to an order for expulsion and Austria has threatened reprisals.

King Carlos I., of Portugal, has disposed of the current story of the sale of Delagoa Bay, in an address opening the Portuguese Parliament, which expressed the purpose of maintaining colonies intact.

China, Japan, and the United States. Developments reported from China continue to be watched with unusual interest here. Railway concessions made to American capitalists, a woolen mill with American machinery, and the establishment of an imperial university under the presidency of Dr. W. A. P. Martin, an American missionary of forty years' standing, are evidences of American pioneering enterprise. The dowager empress, however, has a rebellion in southern provinces on hand, and is taking measures to sustain conservative policies, such as the suppression of newspapers and the concentration of power by the appointment of all viceroys and governors of provinces to be members *ex officio* of the Tsung li Yamun. At Shanghai, some American claims, largely riparian, were thought to be endangered by French claims of extension, and protest was accordingly made by United States Minister Conger and heeded by the Chinese government.

Monarchy and party government clash

in Japan, so that within the last ten months three differently constituted cabinets have resigned and there have been five changes in the cabinet post of minister of public instruction. The latest complete change of official administration is said to be due to a speech made by the minister of instruction, in which he inveighed against the potent sway of money in Japan. His superiors forced him to resign, and the whole cabinet, which had sided with him, went out of power. Since the war with China, Japan has progressed rapidly though expensively. Despite the large indemnity secured from China, and the adoption of the gold standard, she faces a deficiency of about $37,000,000 for the fiscal year. The appearance of a new Japanese minister at Washington, Jutaro Komura (a Harvard graduate), has been signalized by an interview in which he states that "the interests of England, the United States, and Japan are almost identical."

Domestic Concerns. Chicago has passed through another exciting phase of a contest over the proposed extension of street railway franchises under the state law (Allen Law), whose passage made such a stir about a year and a half ago. The opposition to granting fifty-year extensions with the right to a five-cent fare for twenty years, led by Mayor Harrison and supported by all but one of the leading Chicago dailies, together with a mass-meeting campaign, resulted in shelving the proposed legislation by the city councils. To prevent a compromise and to force the issue of municipal ownership Ex-Governor Altgeld has announced his candidacy for mayor of the city.

Socialists were defeated at the annual convention of the American Federation of Labor in their attempts to commit the organization to a political party program. Samuel Gompers was reelected president. The Social Democracy (Debs' organization) surprised the public by electing John C. Chase mayor of the city of Haverhill, Mass., and six out of twenty-one members of the city council.

Church Activity. Church organizations have eagerly taken up an agitation against the seating of the Mormon congressman, Brigham H. Roberts of Utah. The Woman's Board of Home Missions of the Presbyterian Church and members of the National Reform Bureau are particularly active, and many church bodies have passed resolutions of protest. President Snow of the Mormon Church has issued a manifesto declaring that plural marriages are no longer solemnized, but declarations to the contrary are made by Utah Presbyterians and others. Mr. Roberts' seat may be contested by a political opponent in order to open the way for the Fifty-sixth Congress to unseat him, under the clause of the constitution making the House judge of the qualifications of its own members.

Statistics of religious denominations in the United States compiled by the New York *Independent* show an increase of membership during the year 1898 of 862,300, the total membership being 27,714,523. Of this number 8,395,178 are Catholics, 5,898,094 are Methodists, 4,364,427 Baptists, 1,542,401 Presbyterians, 1,526,552 Lutherans, and 1,085,615 Disciples of Christ. The

BRIGHAM H. ROBERTS.
United States Representative-Elect from Utah.

largest gains during the year were made by the Catholics (219,791), Methodists (162,196), and Baptists (131,465).

A Record-Making Country. If the advent of the United States as a world-power was the "ominous" event of the year 1898 politically speaking, figures of United States trade for the year can hardly be reckoned as less startling. The sales of our products to other countries amounted to nearly $1,250,000,000. Our exports exceeded those of any other nation in the world; exceeded those of Great Britain by over $60,000,000. The excess of exports over imports in 1898 amounted to over $600,000,000, in round numbers. Gold imports were nearly double that of any previous year, aggregating $140,000,000. Furthermore, the clearing-house transactions in New York City for the year exceeded those of London by almost $2,000,000, while the commerce of that port exceeded that of London by $10,000,000. On March 1, 1897, the money in the United States stood at $26.44 per capita, of which $16.74 was in unexportable forms and $9.70 in gold; at the close of 1898 it stood at $28.77 per capita, $16.32 being in unexportable currency and $12.45 in gold. During the year 3,018 miles of new railroad were built in the United States, the greatest increase since 1892, six years ago. The output of pig iron, estimated at 11,645,000 tons, exceeded previous records by about 2,000,000 tons and was greater by 2,800,000 tons than Great Britain ever produced. Unsurpassed railroad earnings, and fewer business failures than for five years past, are also reported in the newspapers, from which the foregoing statements have been taken.

The government borrowed $200,000,000 on war bonds, imposed new internal revenue taxes, and faces a six months' deficit of some $83,000,000.

According to the Chicago *Tribune* the lives lost by disaster during the year numbered 7,345; railroad accidents killed 3,590 people; 5,920 persons committed suicide; there were 7,840 murders, 118 lynchings in the South, 9 in the North. Gifts for charity amounted to $23,984,900.

Deaths. Calvin S. Brice, ex-senator from the state of Ohio, died on December 15, at the age of fifty-three. He became a colonel during the Civil War, thereafter teaching school and entering the profession of law. As a railroad lawyer he developed faculties as a promoter, in which capacity he became prominent through the construction of the Nickel Plate Railroad, a parallel line to the Vanderbilt system, which ultimately absorbed it. At the time of his death Mr. Brice was a chief figure in the exploitation of certain concessions in China, being head of the syndicate known as the American Development Company. He began his political career as a Tilden elector in 1876, became chairman of the National Democratic Committee in 1889, was elected United States senator in 1890, and served as a member of the "steering committee," so-called.

THE LATE CALVIN S. BRICE, OF OHIO.

William Black, the English novelist, formerly an editor of the *London Review*, *Examiner*, and *Daily News*, author of "Love and Marriage," "A Princess of Thule," and many other stories, died in London, December 10.

C. L. S. C. OUTLINE AND PROGRAMS.

OUTLINE OF REQUIRED READING.

FOR FEBRUARY.

First Week (ending February 4).

"From Chaucer to Tennyson." Chapter II.

"Men and Manners of the Eighteenth Century." Book II.

In THE CHAUTAUQUAN:

"The Education of Englishmen."

Second Week (ending February 11).

"From Chaucer to Tennyson." Chapter III.

"Men and Manners of the Eighteenth Century." Book III.

In THE CHAUTAUQUAN:

"American Lumber."

"The Testimony of Human Experience."

Third Week (ending February 18).

"From Chaucer to Tennyson." Chapter IV.

"Men and Manners of the Eighteenth Century." Book IV.

In THE CHAUTAUQUAN:

"Chemistry as a Factor in Modern Civilization."

Fourth Week (ending February 25).

"From Chaucer to Tennyson." Chapter V.

"Men and Manners of the Eighteenth Century." Book V.

In THE CHAUTAUQUAN:

"Lord Derby."

"The English Poor Law and English Charities."

FOR MARCH.

First Week (ending March 4).

"From Chaucer to Tennyson." Chapter VI. to page 178.

"Men and Manners of the Eighteenth Century." Books VI. and VII.

In THE CHAUTAUQUAN:

"The Textile Industries of the United States."

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FOR FEBRUARY.

First Week.

1. The Lesson.
2. An Essay—The educational systems of England and America.
3. A Paper—English writers of the fifteenth century.
4. An Essay—The style of eighteenth and nineteenth century literature compared.
5. An Essay—English folk-lore.
6. General Conversation—Important news of the week.

Second Week.

1. Roll-call—Each response to be a quotation from Shakespeare.
2. The Lesson.
3. A Talk—The story of Orpheus.
4. A Paper—Queen Elizabeth and her time as delineated in "Kenilworth."
5. Essay—The sources of Shakespeare's plots.
6. General Conversation—Important events of the week.

Third Week.

1. Roll-call—Each response to be a quotation from Milton.
2. The Lesson.
3. A Critical Literary Study—"Comus," by Milton.
4. Paraphrases—"Paradise Lost" and "Paradise Regained."
5. Readings—Selections from "The Compleat Angler," by Izaak Walton. See "English Prose," Vol. II., by Henry Craik.
6. Table Talk—The news of the week.

Fourth Week.

Dryden Day—February 18.

"The first rank in poetry was beyond his reach, but he secured the most honorable place in the second."

1. Roll-call—The response to be a quotation from Dryden.
2. Biographical sketch—John Dryden.
3. Essay—Dryden's contemporaries.
4. Essay—Dryden's literary art compared with Pope's.
5. A Paper—"Absalom and Achitophel," by Dryden.
6. Readings—Selections from Dryden's works.

FOR MARCH.

First Week.

1. The Lesson.
2. Essay—Pope's influence on English poetry.
3. A Paper—Sentimentalism in English fiction.
4. A Book Review—"The Vicar of Wakefield," by Goldsmith.
5. Readings—Selections from "The Traveler," by Goldsmith, and from "The Seasons," by Thomson.
6. General Discussion—"History as it is Made."

SYLLABUS OF C. L. S. C. READING.

REQUIRED READING IN THE TEXT-BOOKS.

"FROM CHAUCER TO TENNYSON."

II.—FROM CHAUCER TO SPENSER, 1400–1599.

1. The Chaucer school (pp. 35–38).
   (1) Imitations.
   (2) Chaucer's disciples.
      (*a*) Occleve [ok'klēv].
      (*b*) John Lydgate.
      (*c*) The royal poet.
   (3) Result of the imitation of Chaucer.
2. Development of English prose (pp. 38–40).
   (1) Disadvantages to be overcome.
   (2) Tales in prose.
   (3) Maundeville's travels.
   (4) Prose in the fifteenth century.
3. General survey of the fifteenth century (p. 40).
4. The introduction of printing (pp. 40–43).
   (1) The first printer.
   (2) Old methods of publication.
   (3) Place of introduction.
   (4) Books issued from Caxton's press.
      (*a*) Manuals of devotion and religion.
      (*b*) Revisions.
      (*c*) Malory's work.
      (*d*) Translation of Froissart.
5. School of courtly allegory (pp. 43–45).
   (1) The work of Hawes.
   (2) Skelton and his works.
6. Ballad literature (pp. 45–50).
   (1) Character of the English and Scotch ballads.
   (2) Authorship and antiquity.

"*Feræ naturæ.*" Of a wild nature.

   (3) The style of the ballads.
   (4) Ballads of the Scotch border.
   (5) Robin Hood ballads.
   (6) Collections of ballads.
7. General survey of the Renaissance (pp. 50–52).
   (1) Knowledge of Greek and Latin in Western Europe.

"De Consolatione Philosophiæ." On the Consolation of Philosophy.

   (2) Greek scholars in England.
   (3) Opposition to Greek in England.
   (4) Devotees of Greek.
8. New translations of the Bible (pp. 52–53).
   (1) Translators.
   (2) Distribution.
   (3) Other literature of the Reformation.
9. Moore and his works (pp. 53–54).
10. Literature of the first three quarters of the sixteenth century (pp. 54–56).
   (1) Its general character.
   (2) "Tottel's Miscellany."
      (*a*) When written.
      (*b*) The chief contributors.
      (*c*) Evidences of Italian influence.

"*Canzoni.*" Songs. A kind of lyrical poetry in the Italian style.

      (*d*) Improvements in style and forms.
   (3) "The Mirrour for Magistrates."
11. Edmund Spenser and his work (pp. 57–62).
   (1) His first pastoral.
   (2) Biographical details.
   (3) "The Faerie Queene."
      (*a*) The models.

"Chanson de Roland." Song of Roland.

      (*b*) The composite character of the work.
      (*c*) Its allegorical character.
      (*d*) The verse and diction.

"*Ottava rima*" [ot-tä'vä rē'mä]. An Italian form of metrical composition consisting of eight lines of eleven syllables each. The first six lines rhyme alternately and the last two form a couplet.

      (*e*) Sensuous character.
      (*f*) Its ideality.
   (4) Minor poems.

REVIEW QUESTIONS.

1. Describe Chaucer's influence on English literature.
2. Give a history of the development of English prose.
3. Describe the effect on English literature of the invention of printing.
4. Describe the ballad literature of this period.
5. Show how the Renaissance and the Reformation affected English literature.
6. Give an account of Spenser and his writings.

SEARCH QUESTIONS.

1. How long and in what country had the art of printing been practiced before its introduction into England?
2. What were the two most remarkable of Spenser's poems written before "The Faerie Queene"?

III.—THE AGE OF SHAKESPEARE, 1564–1616.

1. Survey of the Elizabethan age (pp. 63–66).
   (1) Limits of the period.
   (2) The central literary figure.
   (3) The character of the queen.
   (4) Entertainment in her honor.
2. Prose of the Elizabethan age (pp. 66–77).
   (1) Introduction of euphuism by Lyly.
      (*a*) Illustrations.
      (*b*) Lyly's style.

(*c*) Imitators of Lyly.
(2) Sir Philip Sidney and his work.
(*a*) Biographical facts.
"Montamayor" [mōn-tā-mā-yōr'].
(*b*) His first work.
(*c*) His prose style.
(*d*) His later works.
(3) Raleigh and his works.
"Singed the Spanish King's Beard." An expression used by Sir Francis Drake when referring to the action in Cadiz Harbor which "in the course of two nights and one day had sunk, burnt, or captured shipping of ten thousand tons lading." The expression means to deal a stinging insult.
(*a*) Biographical facts.
(*b*) Accounts of his travels.
(*c*) His history.
"*Magnum opus.*" Great work.
"*Hic jacet.*" Here lies.
(*d*) Raleigh's verse.
"*Sæva indignatio.*" Fierce indignation.
(4) The literary prose.
(5) Hooker's important work.
(6) Bacon's "Essays."
"*Lumen siccum.*" Dry light.
(7) The character books.
3. Elizabethan poetry (pp. 77–81).
(1) The songs.
(*a*) Their character.
"Rococo." Fantastic; feebly pretentious and tasteless.
(*b*) Marlowe's "Hero and Leander."
(*c*) The Homer of Chapman.
(2) Historical and descriptive poems.
(*a*) Works and authors named.
(*b*) General plan.
(*c*) Drayton's works.
(*d*) The sermon on the poet Lucretius.
"*Suave, mari magno,*" etc.
"'Tis pleasant, when the sea is rough, to stand
And see another's danger, safe at land."
4. The history of the drama (pp. 81–86).
(1) The early drama.
(2) The moralities.
(3) Comedies and tragedies.
(4) The theaters.
(*a*) The first playhouses.
(*b*) London theaters.
(*c*) Stage settings.
(5) Character of the drama.
(*a*) Early play-writers.
(*b*) Lyly's comedies.
(*c*) Lyly's service to the drama.
5. Ante-Shakespearian dramatists (pp. 86–89).
(1) Marlowe's tragedies.
"*Lente,*" etc.
"Run slowly, slowly, steeds of night."
(2) Peele's masterpiece.
(3) Robert Greene's contributions.
(4) The influence of these dramatists.
6. Shakespeare and his works (pp. 89–100).
(1) Authorship of his plays.
(2) Biographical facts.
(3) Publication of his works.
(4) Personality revealed in his works.
(5) First plays.
(6) His historical dramas.
(7) His comedies.
(*a*) First experiments.
"Malade Imaginaire." The imaginary invalid.
(*b*) The perfect type.
(*c*) General plan of construction.
(*d*) His only pure comedy.
(*e*) Comedy mixed with tragedy.
(8) Tragedies.
(*a*) Their ethical character.
(*b*) His method of development.
(*c*) The Roman plays.
(*d*) Least agreeable tragedies.
(9) Criticisms on Shakespeare's art.
(10) His use of the supernatural.
(11) Shakespeare's fame.
7. Ben Jonson and his writings (pp. 100–103).
(1) Biography.
(2) Character of his comedies.
"*Vetus comœdia.*" Earlier comedy.
(3) His subject.
(4) Method compared with Shakespeare's.
(5) The best of his plays.
"Le Médecin Malgré Lui." The physician in spite of himself.
(6) His poetry.

REVIEW QUESTIONS.

1. Describe the general character of the Elizabethan era.
2. Describe the prose literature of this period.
3. Give an account of the poetical productions.
4. Describe the development of the drama.
5. Give a full account of the works of the greatest dramatist of the period.

SEARCH QUESTIONS.

1. What poet is called "the English Petrarch"?
2. After Shakespeare, Beaumont and Fletcher, and Jonson what is the next great name in English drama?

IV.—THE AGE OF MILTON, 1608–1674.

1. The spirit of the age (pp. 104–105).
(1) Compared with the Elizabethan era.
(2) Advent of Puritanism.
2. The drama of the period (pp. 105–112).
(1) The plays of Beaumont and Fletcher.
(*a*) General character of their dramas.
(*b*) The best light comedies.
(*c*) One plot.
(*d*) The female characters.

(*e*) Dramatic methods.
(*f*) The subjects.
(*g*) The pastoral and the burlesque.
(2) Webster and his tragedies.

"Borgias" [bor'jäs]. An Italian family of the fifteenth century, some of whose members were guilty of horrible crimes.

"Cenci" [chen'chē]. An Italian family of the sixteenth century, the head of which was so dissipated and cruel that the other members of the family procured his murder. Beatrice, the daughter, is a favorite subject in poetry and art.

(3) James Shirley's plays.

3. Miscellaneous prose of the period (pp. 113–119).
(1) Importance of prose.
(2) Rise of modern science.
(3) The pseudo-scientists and their works.

"Religio Medici." The religion of a physician.

(4) Works of Thomas Fuller.
(5) Jeremy Taylor's writings.
(6) Letters, table-talk, etc.
(7) Sporting literature.

4. The minor poets (pp. 119–126).
(1) The metaphysical poets.
(2) The church poets.

"*Conceptistas.*" A class of writers who expressed themselves in puns and metaphors, both in poetical compositions and in the pulpit.

(*a*) Donne and his writings.
(*b*) Herbert's poems.
(*c*) Henry Vaughan's verses.
(*d*) Herrick's poetry.

"*Carpe diem.*" Enjoy the present day.

(*e*) Crashaw's poems.
(*f*) Cowley's poetry.
(3) The cavaliers.

"Cœlum Britannicum." The British sky.

5. John Milton and his writings (pp. 126–135).
(1) Biography.
(2) Culture and Puritanism.
(3) Early poems.

"L'Allegro" [lāl-lā'grō]. The mirthful (man).

"Il Penseroso." The pensive (man).

"Circe" [ser'sē]. The enchantress who changed some of Æneas' companions into swine and induced him to remain a year with her.

"La Semaine." The week.

(4) His prose writings.

"Areopagitica." Probably this title was obtained from the name of a noted hill of Athens, Areopagus, where the famous court of justice held its sessions. Some authorities think it an allusion to a famous Greek work of the same title. "Milton was seeking to persuade the High Court of Parliament, our Areopagus, to reform itself by revoking a tyrannical decree against the liberty of the press."

"Defensio pro Popululo Anglicano." Defense of the English people.

"Vaudois Protestants." Also called the Waldenses, from the name of the founder of this denomination, Peter Waldo, or Pierre de Vaux.

(5) The sonnets.
(6) "Paradise Lost."
(*a*) Its theological character.

"Vallombrosa." From the Latin *valles umbrosa*, shady valley. A famous valley east of Florence.

(*b*) Place in literature.
(*c*) Revelation of the poet's personality.
(7) His last poems.
(8) Change of style.

6. Marvell and Wither (p. 135).

REVIEW QUESTIONS.

1. Show how the age of Milton differed from the Elizabethan era.

2. Describe the plays of Beaumont and Fletcher and compare their dramatic method with Shakespeare's.

3. Give a history of the prose writings of this period.

4. Describe the minor poetical works.

5. Give a biographical sketch of Milton and describe his greatest works.

SEARCH QUESTIONS.

1. What is the greatest name among the English divines of the middle of the seventeenth century?

2. Of whose prose writings was it said, "They are a perfect field of cloth of gold. The style is stiff with gorgeous embroidery"? By whom was it said?

V.—FROM THE RESTORATION TO THE DEATH OF POPE, 1660–1744.

1. General survey of the period (pp. 137–139).
(1) Spirit of the restoration.
(2) Characteristic literature.
(3) Foreign influence.

"Corneille" [kor-nāy'].

"Racine" [rä-sēn'].

"Boileau" [bwä-lō'].

(4) Social life of the time.

"*Coup de grace*" [koo de gräs]. A stroke of mercy; the finishing stroke.

"*Bel esprit*" [bel es-prē']. A brilliant mind.

(5) The literary picture of the time.

2. Butler's "Hudibras" (pp. 139–140).

"New Lights." The Separatists, a sect which seceded from the Congregationalists.

"Fifth Monarchy Men." "A sect of millenarians of the time of Cromwell, differing from other Second-Adventists in believing not only in a literal second coming of Christ but also that it was their duty to inaugurate this kingdom by force."

"Ranters." A term of reproach applied to the members of an Antinomian sect of the Commonwealth period.

3. Restoration stage and drama (pp. 140–145).

(1) Reopening the theaters.

(2) Use of classical rules.

"The unities." "The so-called Aristotelian law of unity of time, of place, and of action. This law demanded that there should be no shifting of the scene from place to place, that the whole series of events should be such as might occur within the space of a single day, and that nothing should be admitted irrelevant to the development of a single plot."

(3) Heroic plays.

(4) Borrowings from the French.

"Le Feint Astrologue." The false astrologer.

"L'Étourdi." The heedless one.

"Fourberies de Scapin." The cheats of Scapin.

"École des Femmes." School of wives.

(5) Comedy of Restoration.

(6) The heroes and heroines.

"*Politesse de cœur.*" True politeness.

(7) Representative of contemporary society.

(8) A reforming influence.

(9) Imitators and model compared.

(10) Shakespeare's plays rewritten.

4. Critical school of poetry (pp. 145–147).

(1) The writers and their works.

"L'Art Poétique." French for poetic art.

"Ars Poetica." Latin for poetic art.

(2) The heroic couplet.

"Distichs" [dis'tiks]. Couplets.

5. The lyrical poetry (pp. 147–148).

"Pindaric." Pertaining to the style of Pindar, the greatest Greek lyric poet.

6. Dryden and his works (pp. 148–150).

(1) First great work.

"Annus Mirabilis." Wonderful year.

(2) His political poems.

(3) Power as a satirist.

(4) Skill in controversy.

"Religio Laici" [rē-lij'i-ō lā'i-sī]. A layman's religion.

(5) Critical essays.

7. Bunyan and his work (pp. 150–151).

8. Conjunction of Dryden and Milton (p. 151).

9. General survey of the period of Pope's life (pp. 151–154).

(1) Literature and politics.

(2) State of society.

(3) Men of letters, and public events.

(4) Condition of the church.

"Rochefoucauld" [rosh-foo-kō'].

10. Pope's life and writings (pp. 154–157).

(1) Dryden and Pope compared.

(2) The masterpiece.

"Rosicrucians." Members of a secret society supposed to have existed in the fifteenth century. They pretended to know something about occult science and about the mysteries of medicine, alchemy, and astrology.

(3) Pope as a poet.

(4) His literary art.

"Periphrasis" [pe-rif'ra-sis]. A roundabout manner of speaking; use of unnecessary words.

(5) His literary characteristics.

11. The periodical essay and the writers (pp. 157–159).

(1) The periodicals.

(2) The writers.

(3) Addison's character and style.

(4) Addison as a poet and dramatist.

12. Swift and his works (pp. 159–161).

(1) Biography.

"*Ubi sævi,*" etc. Where cruel disdain is no longer able to lacerate the heart.

(2) His great work.

(3) Its character and purpose.

"Houyhnhnms" [hou'inm, or hoo'inm]. A race of horses which Swift endows with reason.

(4) Swift's irony.

REVIEW QUESTIONS.

1. Give a general survey of the period of the Restoration.

2. Give a history of the drama of this period.

3. What were the great works of Pepys and Butler?

4. Compare the works of Dryden and Pope.

5. Describe the works of Addison and Swift.

SEARCH QUESTIONS.

1. What English author was known as the ignoramus?

2. What author said, "Good God! what a genius I had when I wrote that"? On what occasion did he make the remark?

"MEN AND MANNERS OF THE EIGHTEENTH CENTURY."

BOOK II.—CHARLOTTE LENNOX.

V.—BIOGRAPHY AND CRITICISMS.

1. Biographical facts (pp. 44–45).

2. Estimates of her literary work (pp. 45–47).

"Calprénede" [käl-pre-nād']. A French dramatist and novelist of the seventeenth century.

"Scudéry" [skü-dā-rē']. A French novelist.

"Kotzebue" [kot'se-boo].

VI.—"THE FEMALE QUIXOTE."

1. The opening paragraph (p. 48).

2. Character and training of the heroine (pp. 49–50).

3. The "adventure at church" (pp. 50–53).

4. Advent of a cousin (pp. 54–56).

5. An interview and its results (pp. 57–59).

VII.—"THE FEMALE QUIXOTE" CONCLUDED.

1. The departure and letter of Granville (p. 60).

2. The marquis' displeasure and command (pp. 60–61).

3. Arabella's letter and its superscription (p. 62).
4. Granville's return and his reception (p. 63).
5. Discussion between Granville and Arabella (pp. 63–66).
6. The change in Granville's conduct (pp. 66–67).
7. The discussion about heroines of antiquity (pp. 68–72).
8. Conclusion of the book.

REVIEW QUESTIONS ON BOOK II.

1. Give biographical facts concerning Charlotte Lennox.
2. What were her most important works?
3. What is the general estimate of her works?
4. Give an outline of "The Female Quixote."
5. Describe the style of this work and tell what it reveals concerning old romances.

SEARCH QUESTIONS.

1. Who was Mrs. Lennox's father?
2. What is generally considered her chief work and what is its character?

BOOK III.—ADDISON AND GAY.

VIII.—ADDISON AND HIS WRITINGS.

1. Changes caused by the Revolution (pp. 75–76).

"Ramillies" [rä-mē-yē'].

2. The new literature (pp. 76–77).
   (1) The *Tatler*.
   (2) Other periodicals.
   (3) The style of this literature.
3. Biography (pp. 77–79).
4. Addison's papers (pp. 79–104).
   (1) Vignette of Sir Roger.
      (*a*) His characteristics.

"*Quorum*." In England, those judges whose presence is necessary to constitute a bench.

      (*b*) Country life.
      (*c*) His chaplain.
      (*d*) An odd incident.
      (*e*) London life.

"Prince Eugene." A famous Austrian general.

"Scanderberg." An Albanian commander of the fifteenth century.

      (*f*) Generosity.
      (*g*) Scene in a coffee house.
      (*h*) A trip to Spring Garden.
      (*i*) The butler's letter.
   (2) The party patches.
   (3) The cat-call.

"Thespis." The founder of tragedy.

"Momus." The god of mockery and censure in Greek mythological tales.

   (4) The cries of London.
   (5) About the newspapers.
   (6) The trials.
   (7) Manners in town and country.
   (8) A lady's headgear.
   (9) A diary.
   (10) The fan story.

IX.—GAY AND HIS WORK.

1. Biographical facts (p. 105).
2. His successful works (p. 105).
3. Extract from "Trivia" (pp. 105–108).

"Roquelaure" [rŏk'e-lōr].

REVIEW QUESTIONS ON BOOK III.

1. Describe the changes caused by the Revolution.
2. What periodicals grew out of these changes?
3. Give biographical facts about Addison and Gay.
4. From the papers on Sir Roger de Coverley what is revealed concerning the general character of the times?
5. Describe the manners, customs, and styles as delineated in the other excerpts from Addison's essays.
6. What does Gay's "Trivia" tell about the manners of the time?

SEARCH QUESTIONS.

1. For what did Addison have a high reputation in college?
2. What was the title of Gay's first production?

BOOK IV.—RICHARDSON AND HARRIET BYRON.

X.—FACTS ABOUT RICHARDSON AND HIS WORKS.

1. The picture (pp. 109–110).

"Paduasoy" [pad'ū-a-soi]. A rich silk, originally manufactured at Padua and used in the eighteenth century for garments for both men and women. The name is also given to a garment made of this material.

2. The author's society (pp. 110–111).
3. Richardson's view of woman (p. 111).
4. Three important works (p. 111).
5. Richardson's forte (p. 112).
6. The gift of narration (p. 113).
7. Fame of "Pamela" (pp. 113–114).

XI.—CRITICISMS AND "SIR CHARLES GRANDISON."

1. Criticisms (pp. 115–117).
   (1) By Lady Mary.
   (2) Richardson's characters.
   (3) Termination of "Sir Charles Grandison."
   (4) "Correspondence."
2. "Sir Charles Grandison" (pp. 117–131).
   (1) General character and extent.
   (2) Opening.
   (3) Harriet Byron in London.
   (4) Description of a masquerade custom.
   (5) An abduction and the rescue.
   (6) History of the Grandison family.
   (7) Advent of Sir Charles.
   (8) Curiosity concerning his affairs.
   (9) An interview with Sir Charles.

XII.—"SIR CHARLES GRANDISON" CONTINUED.

1. Story of Sir Charles' sojourn abroad (pp. 132–134).

2. Effect of the story on Harriet's friends (p. 134).
3. A second interview (p. 135).
4. A wedding (p. 135).
5. A second trip abroad and the letter to home friends (pp. 136–138).

XIII.—"SIR CHARLES GRANDISON" CONCLUDED.

1. Criticisms (p. 139).
2. A letter from Miss Byron (p. 140).
3. The news from abroad (p. 141).
4. Progress and end of the Clementina episode (pp. 141–144).
5. Termination of the novel (pp. 144–146).

REVIEW QUESTIONS ON BOOK IV.

1. Describe the conditions under which Richardson produced his works.
2. What were his great novels and what criticisms have been made on them?
3. Give an outline of "Sir Charles Grandison."
4. What is to be learned from Richardson about the manners and customs of the times?

SEARCH QUESTIONS.

1. In what did Richardson in his boyhood assist the young women of his acquaintance?
2. How old was Richardson when his first novel was printed?

BOOK V.—FIELDING.

XIV.—FIELDING'S LIFE AND WORKS.

1. Place in literature (p. 146).
2. Biographical facts (pp. 147–149).

"*Ne plus ultra.*" Nothing further; perfection.

"*Perdu.*" Lost.

3. Qualities of his genius (p. 149).
4. "Tom Jones" (pp. 149–167).
   (1) The qualities.
   (2) An author as a host.
   (3) The hero.
   (4) Descriptions of Mr. Allworthy's estate and of scenery.
   (5) The present to Miss Allworthy.
   (6) Character of Tom Jones and Master Blifil.
   (7) The hunting incident.

"*Meum* and *tuum*." Mine and thine.

   (8) The sale of a horse.
   (9) Example of the sublime.

"Boreas." In Greek mythology the personification of the north wind.

"Eurus." The east wind.

"Zephyrus." The west wind.

   (10) Description of Sophia Western.
   (11) The story of the bird.
   (12) Relation of Tom, Sophia, and Master Blifil.
   (13) Tom asks a favor of Sophia.

XV.—"TOM JONES" CONCLUDED.

1. The hero turned out of doors (p. 168).
2. Sophia leaves home (p. 168).
3. The journey of Jones and Partridge to Coventry (pp. 169–173).
4. Description of a trip to London (pp. 173–174).
5. Events in London (pp. 175–177).
   (1) Tom's arrival.
   (2) Partridge at the theater.
   (3) Squire Western in the city.
   (4) The *dénouement.*
6. The termination of the story (pp. 177–178).
7. "Farewell to the Reader" (pp. 178–179).

REVIEW QUESTIONS ON BOOK V.

1. Give a biographical sketch of Fielding.
2. What are the distinguishing qualities of Fielding's genius?
3. Give an outline of his greatest novel and point out its good qualities.
4. What do the excerpts from "Tom Jones" show in regard to the manners of the eighteenth century?
5. Give a synopsis of the "Farewell to the Reader."

SEARCH QUESTIONS.

1. Of what paper was Fielding the editor?
2. What did Dr. Johnson say about "Amelia"?

REQUIRED READING IN "THE CHAUTAUQUAN."

I.—"THE EDUCATION OF ENGLISHMEN."

1. What an English public school is (pp. 427–428).
2. Eton College (pp. 428–432).
   (1) The students.
   (2) Early history.
   (3) Situation.
   (4) The government.
   (5) The collegers and oppidans.

"To be on a foundation." "Entitled to a support from the proceeds of an endowment, as a scholar or a fellow of a college."

   (6) The boarding-houses.
   (7) Fagging.
   (8) Reforms.
   (9) Scholarship at Eton.
   (10) Manners of Etonians.
   (11) Intellectual life.
   (12) Eton Montem.
3. Winchester School (pp. 433–434).
   (1) Founding and government.
   (2) The pupils.
   (3) Fagging.
   (4) Corporal punishment.
   (5) School etiquette and notions.
   (6) The games.
   (7) The buildings and town.
4. Harrow School (pp. 434–436).
   (1) The founder and the school statutes.
   (2) The scholars.

(3) The government.
(4) The games.
(5) The buildings.
(6) The monitors.
(7) Noted Harrovians.
(8) Characteristic features.
(9) Harrow's position.

5. The school mottoes (p. 436).

"*Floreat Etona.*" Let Eton flourish.

"*Stet Fortuna Domus.*" Let the prosperity of the house continue.

II.—"AMERICAN LUMBER."

1. The value of forest products (p. 436).
2. The forest wealth of the United States (pp. 436–437).
3. The qualities of building timber (p. 437).
4. Influence of forests on civilization (p. 437).
5. Timber in the north temperate zone (p. 437).
(1) Varieties.
(2) Pines.
(3) Spruce.
(4) Deciduous trees.
6. General utility of wood (pp. 437–438).
7. The lumber business (pp. 438–439).
(1) Extent.
(2) Early methods of lumbering.
(3) Influence of railroads.
(4) Decrease of lumber supply.
(5) Acreage exploited annually.
8. Measures to restore forests (p. 439).
9. The distribution of trees (pp. 439–440).
(1) In New England.
(2) In the Middle, Central, and Northern States.
(3) The hardwood market.
(4) The southern fields.
(5) The western forests.

III.—"LORD DERBY."

1. The Stanley family (p. 440).
2. Edward Geoffrey in the House of Commons (pp. 440–441).
(1) Associates.
(2) In the Irish Office.
(3) Secretary of state for the colonies.
(4) No longer a Whig.
(5) Lord Stanley contrasted with Peel.
(6) A follower of Peel.
3. Lord Stanley in the House of Lords (pp. 441–444).
(1) Opinions on free trade.
(2) Factions in the Tory party.
(3) Lord Stanley the Earl of Derby.
(4) The earl in power.
(5) A new ministry.
(6) Refusal to be prime minister.
(7) The reasons for the refusal.
(8) Relation with the court.
(9) His second ministry.
(10) Lord Palmerston's administration.
(11) Gladstone's defeat.
(12) The third administration.
(13) Last speech.
(14) Death of Lord Derby.

IV.—"CHEMISTRY AS A FACTOR IN MODERN CIVILIZATION."

1. Intellectual progress since Plato's time (p. 444).
2. Scientific method of study (p. 444).
3. Place of chemistry in the curriculum (p. 444).
4. Chemical pursuits in Germany (pp. 444–445).

"*Eins, zwei, drei*" [īns, zwī, drī]. One, two, three.

5. Chemistry's contribution to the well-being of mankind (pp. 445–446).
(1) In agriculture.
(2) In physiology.

"Phenacetin" [fē-nas'e-tin]. It occurs in small, colorless crystals, which are only slightly soluble in water.

"Antipyrine" [an-ti-pī'rin]. The crystals are brilliant scales and they dissolve readily in water.

(3) In pathology.
(4) In the manufacture of perfumes and extracts.
(5) In the production of explosives.
(6) In the iron industry.
(7) In the manufacture of paper.
(8) In other fields.
6. Sulphuric acid (pp. 446–447).
(1) Its extensive use.
(2) Occurrence in nature.
(3) Its manufacture.
7. Potassium and sodium carbonates (pp. 447–448).
(1) Occurrence in nature.
(2) Their manufacture.
(3) The first by-products.
(4) A simpler process for making sodium carbonate.
(5) Other by-products.
(6) Quantity manufactured.
8. Influence of chemistry in other industries (p. 448).

"Chevreul" [she-vrēl'].

"*Scientia est potentia.*" Knowledge is power.

V.—"THE TESTIMONY OF HUMAN EXPERIENCE."

1. Christ and Christianity in this century (p. 449).
2. Confirmation of Christianity (pp. 449–451).
(1) Search for truth.
(2) By the scientist.
(3) What the historian says.
(4) The modern method.
(5) Sir Edwin Arnold's work.
(6) Testimony of human life.

3. Adaptation of Christ to man's needs (pp. 451–452).
   (1) In the revelation of God.
   (2) Elevation of man.
   (3) Appeal to consciousness of duty.
   (4) In trying experiences of life.
4. Importance of self-surrender to Christ (p. 452).

VI.—"THE ENGLISH POOR LAW AND ENGLISH CHARITIES."

1. Duty of the state to the poor (p. 452).
2. Parliamentary act of 1796 (p. 453).
3. Poor Law Act of 1834 (p. 453).
4. Administration of relief (pp. 453–454).
5. General tendency of the administration (p. 454).
6. Proportion of pauperism (p. 454).
7. Poor laws of Scotland, Ireland, and Wales (p. 454).
8. Care of lunatics (p. 454).
9. Voluntary and private relief agencies (pp. 454–455).
10. Endowed charities (pp. 455–456).
11. New forms of philanthropy (p. 456).
12. The charity organization system (pp. 456–457).
13. Misdirected charity (p. 457).
14. English and American systems of relief compared (p. 457).

ANSWERS TO SEARCH QUESTIONS IN "THE CHAUTAUQUAN" FOR JANUARY.

"TWENTY CENTURIES OF ENGLISH HISTORY."

XIV.

1. In 1598 by Henry IV. of France. It put an end to the religious wars. 2. James II.

XV.

1. Walpole; when his opponents were celebrating his defeat in the matter of war with Spain. 2. William Cobbett; "Peter Porcupine's Gazette."

XVI.

1. Upon the pretext that Dost Mohammed had attacked England's ally, Runjeet Singh, who had an independent kingdom in the Punjaub, and that Shujah, whom the English considered the lawful heir to the throne, was under British protection. 2. Disraeli.

"EUROPE IN THE NINETEENTH CENTURY."

XVIII.

1. The riots of the Luddites. 2. Malta, Ceylon, Cape of Good Hope, Mauritius, and a few West Indies islands.

XIX.

1. After 1849. 2. Orange Peel, in allusion to his hostility to the Catholics.

XX.

1. Richard Cobden. 2. Richard Cobden.

XXI.

1. In 1857, in New York, to assist in the independence of Ireland. 2. Robert Emmet.

"FROM CHAUCER TO TENNYSON."

1. About 32,250 lines. 2. William Langland.

"MEN AND MANNERS OF THE EIGHTEENTH CENTURY."

I.

1. On her son and daughter; on five persons on whom a sentence of death had been pronounced. 2. Beaumont.

II.

1. "Town Eclogues." 2. To her "Letters."

III.

1. "Ode on Solitude," written when he was about twelve years of age. 2. Twenty-four.

IV.

According to Dr. Johnson, £5,620, which does not include some sums paid by subscribers to the work. 2. "Black-eyed Susan."

THE C. L. S. C. CLASSES.

1882–1902.

CLASS OF 1899.—"THE PATRIOTS."

"Fidelity, Fraternity."

OFFICERS.

President—John C. Martin, New York, N. Y.

Vice Presidents—John A. Travis, Washington, D. C.; Charles Barnard, New York, N. Y.; Rev. Cyrus B. Hatch, Pa.; Frank G. Carpenter, Washington, D. C.; John Brown, Chicago, Ill.; Charles A. Carlisle, South Bend, Ind.; Edward Marsden, Alaska; William Ashton, Uxbridge, England; Miss Alice Haworth, Osaka, Japan; Miss Frances O. Wilson, Tientsin, China.

Secretary—Miss Isabelle T. Smart, Brielle, N. J.

Treasurer—John C. Whitford, Detroit, Mich.

Trustee—Miss M. A. Bortle, Mansfield, O.

CLASS EMBLEM—THE FLAG.
CLASS COLOR—BLUE.
CLASS FLOWER—THE FERN.

IT is not too soon to begin planning for the summer festivities of the Patriot Class. The fern and the flag will be found very prominent at at least fifty Assemblies in '99. Chancellor Vincent has already been secured for the Recognition address

at the New England Assembly, and plans are being matured for an enthusiastic rally of the class in New England.

CLASS OF 1900.—"THE NINETEENTH CENTURY CLASS."

"Faith in the God of truth; hope for the unfolding centuries; charity toward all endeavor."

"Licht, Liebe, Leben."

OFFICERS.

President—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

Vice Presidents—Rev. John A. McKamy, Nashville, Tenn.; Rev. Duncan Cameron, N. Tonawanda, N.Y.; J. F. Hunt, Chautauqua, N. Y.; Morris A. Greene, Pittsburg, Pa.; Mrs. Mary H. Gardner, Kansas City, Mo.; Mrs. James H. Bentley, Ridley Park, Pa.

Secretary and Treasurer—Miss Mabel Campbell, 53 Younglove Ave., Cohoes, N. Y.

Trustee—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

CLASS EMBLEM—EVERGREEN.

CLASS COLOR—GRAY.

CLASS OF 1901.—"THE TWENTIETH CENTURY CLASS."

"Light, Love, Life."

OFFICERS.

President—Dr. W. S. Bainbridge, New York, N. Y.

Vice Presidents—William H. Mosely, New Haven, Conn.; Rev. George S. Duncan, Washington, D. C.; John Sinclair, New York, N. Y.; Mrs. Samuel George, Wellsville, W. Va.; Dr. Eliza Mosher, Ann Arbor, Mich.; Mrs. T. S. Coleman, San Antonio, Tex.; Mrs. Miller, Jacksonville, Fla.

Executive Committee—Mrs. Ned Arden Flood, Chicago, Ill.; Prof. Henry Cohn, Evanston, Ill.; Mrs. Jamison.

Secretary and Treasurer—Miss Harriet E. Barse, 1301 Brooklyn Ave., Kansas City, Mo.

CLASS FLOWER—COREOPSIS.

CLASS EMBLEM—THE PALM.

CLASS OF 1902.—"THE ALTRURIANS."

"Not for self, but for all."

OFFICERS.

President—Dr. John Henry Barrows, Chicago, Ill.

Vice Presidents—Col. Geo. W. Bain, Lexington, Ky.; Mr. A. T. Van Laer, New York, N. Y.; Mr. J. T. Robert, Chicago, Ill.; Mr. M E. Baird, Ohio; Madame Emma D. Rupin, St. Louis, Mo.; Miss Harriet Walker, Wellesley College; Mr. Albert Watson, Mt. Vernon, Ill.; Miss Sallie Leonard, Jackson, Mich.; Miss Jewell Gould, Aspen, Col.; Miss Belle Kearney, Flora, Miss.

Honorable Vice Presidents—The Earl and Countess of Aberdeen.

Secretary—Mrs. Josephine Griffith Rabb, East Aurora, N. Y.

Treasurer—Prof. J. C. Armstrong, 530 Lincoln Ave., Pittsburg, Pa.

CLASS FLOWER—AMERICAN BEAUTY ROSE.

GRADUATE CLASSES.

THE graduates of '98 have worked out a very happy idea for a calendar for the new year. Twelve blank sheets of good writing paper, about six inches by four, are tied firmly together by a bit of ribbon at the top. At the bottom of each page is pasted the calendar for that month and above it are ruled six lines for the names of books read during the month, with vertical lines a half inch from each edge to mark off the date of beginning and finishing the books. At the top of the first page of the calendar appears the quotation:

"To get at the heart of books, we must live with them and in them."

The calendar was introduced to its friends with a characteristic sentiment:

"It is my own invention,"
As the "knight" in "Alice" said,
Just to keep the yearly record
Of the books that have been read.
May you find a goodly number
When ninety-nine has sped.

This idea is commended especially to C. L. S. C. graduates, who when the four years' course has been finished need sometimes a daily reminder that progress in reading must be continuous and persistent.

A RECENT report from the state secretary for Nebraska, Mrs. L. S. Corey, makes note of the fact that a diploma was awarded to the C. L. S. C. in recognition of its exhibit at the Trans-Mississippi Exposition in Omaha during the past summer. The credit of the exhibit is entirely due to Mrs. Corey, who planned and carried it through most effectively. Mrs. Corey has also achieved another notable success in the recognition of the C. L. S. C. course by the Nebraska State Teachers' Association, who have adopted it in the interest of the teachers of the state, Nebraska being the first state to take such action officially.

AN incorrect announcement appeared in THE CHAUTAUQUAN for December to the effect that Mrs. J. C. Martin, of New York, was at the head of the Tribune Sunshine Society, and her address was given No. 1 Broadway. C. L. S. C. members are asked to note that Mrs. Martin is in charge only of the C. L. S. C. and W. C. T. U. branches of this society, and items for her column should be addressed to Mrs. Emilie D. Martin, Tribune Office, Nassau Street, New York. Members of the C. L. S. C. can do much to extend the C. L. S. C. and also to help members of the Sunshine Society by sending to Mrs. Martin an occasional letter which will show how the C. L. S. C. reaches and helps isolated people especially.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God." *"Let us Keep our Heavenly Father in the Midst."*

"Never be Discouraged."

C. L. S. C. MEMORIAL DAYS.

OPENING DAY—October 1.
BRYANT DAY—November 3.
SPECIAL SUNDAY—November, second Sunday.
MILTON DAY—December 9.
COLLEGE DAY—January, last Thursday.
LANIER DAY—February 3.
SPECIAL SUNDAY—February, second Sunday.
LONGFELLOW DAY—February 27.
SHAKESPEARE DAY—April 23.
ADDISON DAY—May 1.
SPECIAL SUNDAY—May, second Sunday.
SPECIAL SUNDAY—July, second Sunday.
INAUGURATION DAY—August, first Saturday after first Tuesday
ST. PAUL'S DAY—August, second Saturday after first Tuesday.
RECOGNITION DAY—August, third Wednesday after first Tuesday.

SPECIAL MEMORIAL DAYS FOR 1898–99.

ALFRED DAY—October 18.
CAVOUR DAY—November 15.
CROMWELL DAY—December 16.
GLADSTONE DAY—January 14.
DRYDEN DAY—February 18.
WORDSWORTH DAY—March 17.
SHELLEY DAY—April 20.
TENNYSON DAY—May 18.

NEW CIRCLES.

CANADA.—The pastor of a church in Hamilton, Ont., has found an opening for a literary club in that place and has organized a circle of fourteen.

MASSACHUSETTS.—The work of fourteen people at South Framingham dates from a meeting held in October, when they promised to join the new class. All have not yet enrolled at the central office.——An organizer in Boston reports five new names.——The Chautauqua interest in Brockton does not wane and new members are still being added.——West Newton has five new members.

CONNECTICUT.—The secretary of the circle at Vernon writes interestedly of the ten students of C. L. S. C. literature in that place.

NEW YORK.—The pastor of the Presbyterian Church, Guilderland, sends eight names as a result of interest shown in the Chautauqua cause.—The value of systematized study is appreciated by a few people in Yorkshire who are planning for a circle to include a large number of those interested in things educational.——Five ladies from Barnes Corners were enrolled the latter part of November.——December finds people from Deer River and Le Roy beginning their work. This is not too late to enroll, if steady application to work continues to the end of the year.——Three new members are reported from Brooklyn.

NEW JERSEY.—Six young ladies of Rahway, who have just finished school, will continue their study by taking the regular C. L. S. C. course.——About ten or twelve energetic readers at Newark are to become regularly enrolled members.——Two names are received from Bridgton.

PENNSYLVANIA.—The course of English history and literature is chosen as the basis for study in the newly organized circle at Warren.——The circle of the Fortieth St. M. E. Church, Philadelphia, organized early in October, is composed of seven faithful students. The organizer of another circle in this city says: "We are all busy people and took up the work because we desired to pursue a regular course of reading."——A circle of eleven members at Easton has made an excellent beginning.

MARYLAND.—The Class of 1902 has a promising circle in the ten recruits from Baltimore.

DISTRICT OF COLUMBIA.—The first meetings of the circle in Washington showed great interest, and there has been no lack of enthusiasm in the succeeding meetings.

TENNESSEE.—The enrollment of five new members at Paris shows an honest appreciation of Chautauqua's noble mission.

TEXAS.—Inquiries concerning the courses come from an individual reader in Decatur, who is trying to win others for the course, in accordance with the motto, "Not for self, but for all."——Dallas is a center of C. L. S. C. enthusiasm.

INDIANA.—There are a dozen excellent students in Elwood who have entered the freshman class.——A list of five names from Bloomington is added to the 1902 roll.

ILLINOIS.—The Altrurians are reinforced by five earnest Chautauquans at Elgin.

KANSAS.—The young people's circle at Wichita have not yet chosen a name but they are doing good work.

WASHINGTON.—The study of Shakespeare is the course decided upon by six ladies at Seattle.

OLD CIRCLES.

CANADA.—Primrose Circle, Dandas, has reorganized with a membership of twenty-three, ten of whom are new workers. The secretary reports the

English year as of great interest to Canadians generally.

MAINE.—The Progressives of Belfast are doing the work with their usual diligence.——A member of the Dirigo Circle of Lewiston sends membership fee and reports progress in her memoranda work. ——The efficient secretary of the Benepeag Circle, of Springvale, reports two renewals of membership.

VERMONT.—"New members received at every meeting" is the encouraging report from a well-ordered circle at Burlington.

CONNECTICUT.—The secretary of Hawthorne Circle sends the following: "The Hawthorne Chautauqua Circle of Wapping met September 16, at the home of one of its members, to reorganize. Officers for the coming year were chosen. A paper for membership was circulated and twenty-two names were given, sixteen of whom wished to become registered members and six local members. The outlook for our circle is promising. Our president remarked that he thought it was due to a large extent to the influence of our circle that a free public library was about to be established in our town." ——A newspaper clipping from Ansonia contains this interesting account of an evening of recreation: "The members of the Chautauqua Circle, both old and new, met Monday evening at the home of the president, Miss Minnie Fielding, of Lock Street. It was a recreation meeting, at which all books and tasks were laid aside. It was a pleasant reunion of the old and new members, the company being quite large. A pleasing program was rendered and the varied talent of the Chautauquans made the evening doubly pleasant. There were piano solos and duets, college songs, recitations, and readings. There were also games and other forms of amusements, so that all could find something congenial to their tastes. Miss Fielding is a pleasant entertainer, as all present will testify. At the next meeting the studies will be resumed."——A graduate of '86, of New Haven, and a member of Addison Moore Circle, is reading this year's books as a seal course. The president of Trinity Circle, an active organization of New Haven, shows his interest in the Chautauqua cause by the list of names he has secured for 1902.

NEW YORK.—A year book containing the lessons for the year and the date and place of each meeting, with the leaders and the topics assigned, is sent out by Canandaigua Circle. Among the attractions planned by the circle for December was a lecture by Rev. J. Easter on "The Druids and Druidical Remains, and the Introduction of Christianity into England." The meetings are profitable and entertaining, with often some new feature introduced to enliven the study.——A letter from Jamestown shows the C.L.S.C. as a working factor in that city. ——A new reader from Schenectady enrolls in the new class and has become a member of the Y. W. C. A. Circle.——Edelweiss Circle, Mount Vernon, is still found reading zealously.——Stockton has a circle.——A newsy letter from Elmira contains the following: "The Current Topic Chautauqua Circle of Elmira has entered upon its third year of work with much enthusiasm. At present there are eighteen members and we have had an average attendance of twelve. Our meetings are held Thursday mornings at the homes of the members most centrally located. The first half hour of our meeting is spent in giving the current items of interest with which each member responds to the roll-call. Each member takes charge of the program for two weeks during the year and calls upon any other members for assistance. Two or more papers are given upon subjects connected with the lesson at nearly all of our meetings. One morning was spent in character sketches. Each member took some important personage from the two books on history which we have been studying and described the principal events of the life but did not give the name, leaving that for the others to guess. We are fortunate this year in being able to have one hundred books on the C. L. S. C. reading from the New York State Traveling Library. These books are of great help to many of the members."

NEW JERSEY.—The secretary of a recently organized S. H. G. as an auxiliary to the Alpha Circle, Vineland, says in her report of their work: "We organized, October 3, with nine post-graduates and five honorary members. The latter are public school-teachers, who have not time for the whole course of C. L. S. C. work but wish to do some systematic reading. We hold our meetings monthly, and have already finished 'David Copperfield' and 'Bleak House.' Our meetings have consisted of readings from the book to be taken up that evening, as from Forster's life of Dickens, giving opinions, guessing quotations from books, etc., interspersed with music, and one chapter each evening from 'What is Literature'? At our next meeting we are to review our work, delineate or personate prominent characters in each book, and study our memoranda questions. We have a very pleasant society, and anticipate much pleasure and profit from our year's work."

PENNSYLVANIA.—The Vesper Service is again instrumental in bringing members into the C. L. S. C., as the following extract proves: "The Chautauqua spirit is still alive in Corry. At a Vesper Service, held in the Methodist Church, November 13, about forty entered heartily and reverently into the service. The president of our local circle presided, the president of the Epworth League read the Scripture lesson, our pastor and Sunday-school officers took part, and we all felt it was good to be there."——Letters concerning the Chautauqua work in Pittsburg are very encouraging.

TENNESSEE.—Graduation will crown the continued efforts of the Chautauquans in Clarksville.

OHIO.—The class now reading in Fostoria numbers seventeen, and all are earnest workers.——The Perkins Circle, Sandusky, are through with last year's books and are well along on the English year.——A number of educated people in Dry Run belong to the Nineteenth Century Class.——The usual strict adherence to the C. L. S. C. interests makes the circle at Sidney a strong literary factor.——The transfer of a valuable student is made from Lowell Circle, Columbus, to Otterbein Circle, of Westerville.——The programs in THE CHAUTAUQUAN are followed by the readers at Ashland.——At Greensburg is to be found a model circle, where the work is pursued with an earnestness and zest which insure the greatest possible benefit.

INDIANA.—A live circle at South Wabash represents all the undergraduate classes in its membership of fifteen.

ILLINOIS.—The greater number of the class at Ridgefarm are sophomores, while there are a few freshmen.

MINNESOTA.—Hope Circle, of Minneapolis, is in the ranks of the enthusiastic readers.——A report concerning the work in Tower shows the progressive spirit among the Chautauquans there.

MISSOURI.—This is the twelfth year for all the readers in Marshall. They are charter members and are as enthusiastic as when they first began the course.

KANSAS.—The following is from Kansas City: "Our circle, the F. W. Gunsaulus, is late in reporting this year, as we did not begin work until November 1, but we have an enthusiastic membership who plan for better work this winter than we have ever done before. We expect to be able to send in more new members soon, and have a number of persons doing the reading with our circle who do not care to enroll as regular Chautauquans. On November 10, through the Christian Endeavor Lecture Course, our circle members were privileged to enjoy a lecture from Dr. Gunsaulus, whose inspiring work at Ottawa Assembly was the occasion of a circle forming in Kansas City."

COLORADO.—Membership fees are received from Boulder.

CALIFORNIA.—The excellent report of the alumni meeting at Sacramento we give in part: "For the twelfth time the C. L. S. C. alumni of California have held their annual reunion and banquet. On the evening of October 15 the parlors of Mrs. E. C. Hart were converted into a veritable Hall in the Grove. The twenty-four graduates who joined to form the charmed circle are residents of Sacramento, Oak Park, Bruceville, Folsom, and Vallejo, and, with the exception of '91 and '94, every C. L. S. C. class for the past fifteen years was represented. A spirit of reunion was in the air, and the Chautauqua salute was not considered too good to greet a rarely seen but much esteemed member. The president, George Purnell, carried the business through creditably and delivered his address with dignity. One of the interesting numbers of the program was a paper by Miss Fern Andrews, a '98 who had the experience, unique in our circle, of graduating at Chautauqua. An original poem by Miss Virna Woods was highly appreciated. Mr. C. T. Noyes gave an instructive history of the origin of the C. L. S. C. These are but hints from a program which was varied and full of interest. It was eleven o'clock before the company passed under the Old Glory portiere into the banquet room. The patriotic spirit of the year was manifested in decorations, souvenirs, and even refreshments. The napkins were pitched like little tents and over each waved a tiny flag. As the tricolor ice cream, with cake to match, appeared it was spontaneously greeted with the chorus, 'Three Cheers for the Red, White, and Blue.' The toasts were responded to in a way which showed the Chautauqua enthusiasm which each one felt. A verse of 'Auld Lang Syne' was the signal for parting, and it is believed that no member went away without lively anticipations of the reunion in October, 1899."——Reports from Los Angeles show marked progress in the circle there.——San José is still interested in the C. L. S. C., and a clipping tells us that the Houghton Circle has been in existence for ten years and that Rev. Philip Graif, president of the circle, preached the baccalaureate sermon.——Central C. L. S. C. of San Francisco started the year with thirty members, which they hope to increase, as the interest is good.——Marengo Avenue Circle, Pasadena, is reported as doing the required work with energy.

OREGON.—The Classes of 1900 and 1899 are represented in the class at Hillsdale.

TALK ABOUT BOOKS.

Books for Boys and Girls.

Henry Inman's story, "The Ranche on the Oxhide,"* is a restoration of frontier life in the third quarter of the present century. It is a recital of the experiences of a Vermont family of six members who took up a claim in Kansas. The hardships of pioneer life are clearly drawn, but no less vivid are the author's delineations of the excitement and dangers of hunting, trapping, and fishing in a country frequently raided by hostile Indians. The six full-page illustrations represent characteristic scenes of the period.

"For Peggy's Sake"† is a story with a simple, pleasant plot which the reader will be pleased to follow to its conclusion. Peggy, or Meggy, as she is called in the first part of the story, is a whole-souled little girl whose venturesome nature causes her unjust censure and punishment. This same spirit, however, brings happiness to others and finally to herself, but how we will leave the reader to find out for himself. The author has an attractive way of telling a story and it seems a pity to mar it by even an occasional grammatical error.

A story with a moral, and a good one, is "Philip Barton's Secret."‡ Philip is a poor mechanic employed in Mr. Weston's machine shop. After his conversion he tries to have others learn the secret of his happiness. Some college students, his employer's son, and other workmen in the shop figure in this story, which is by no means devoid of exciting incidents.

The sub-title of "Six Young Hunters"‖ informs us that W. Gordon Parker has described the adventures of the Greyhound Club, the members of which were college boys. One summer they betook themselves with dogs, horses, and guns to a wild, unfrequented part of Indian Territory, where they spent the vacation in a camp erected by an uncle of one of the boys. The excitement of fishing, hunting bears, deer, wolves, and panthers was nothing to that of capturing a gang of railroad wreckers whom officers of the law were glad to let alone. The recital is an intensely interesting one and the author has done his work well. The illustrating is also the work of his pen.

Not every enterprising, mischievous lad has the adventures that Herbert E. Hamblen describes in "The Story of a Yankee Boy."* William Kimball is the lad's name. His pranks get him into more trouble than he can endure, so he runs away from home, tramps to New York, ships on board the *Chanticleer* for California, is shipwrecked, joins a whaler, and after a successful cruise in the arctic regions returns home with a large fortune. The author's happy way of telling this story makes it for the moment very real.

Mr. Elbridge S. Brooks is doing a good service by writing biographical sketches of the great men of our country in a style which suits the taste and capacity of the boys and girls. A recent addition to the series begun some time ago is "The True Story of Benjamin Franklin."† It is an absorbing story, told in the author's most animated way, and it is an inspiration to an energetic, resolute youth. The volume is attractively and appropriately illustrated.

Pansy is the author of "Reuben's Hindrances,"‡ a story for boys which fully illustrates a deep religious truth. Reuben is an orphan, working for his board and clothes in a family too poor to clothe or feed him well, and he is often ill-treated. By pluck, truthfulness, and honesty, underlying which is a deep faith in God, the lad overcomes the great obstacles to his future advancement. The story is gracefully told and holds the reader's interest throughout.

Nansen's "Farthest North."

For men of undaunted courage and an investigating turn of mind the arctic pole seems to have an irresistible attraction. This was the case with Fridtjof Nansen, a Norwegian who has conducted several expeditions to the arctic regions. In 1882 he explored the waters contiguous to Greenland and Iceland, and a few years later he crossed the Greenland ice-cap from the east coast to the west. The experiences of these trips prepared him for the more extended expedition which began in 1893 after several months of careful, systematic preparation. The first essential in an enterprise of this nature is money, and how it was obtained for this undertaking the author has explained in his

---

*The Ranche on the Oxhide. By Henry Inman. Six full-page illustrations. 297 pp. $1.50.——† For Peggy's Sake. By Mrs. Edwin Hohler. Illustrated by F. H. Townsend. 216 pp. $1.00. New York: The Macmillan Company.

‡ Philip Barton's Secret. By Mrs. May Anderson Hawkins. 228 pp. 85 cts. Cincinnati: Curts & Jennings. New York: Eaton & Mains.

‖ Six Young Hunters. By W. Gordon Parker. 335 pp. $1.25. Boston: Lee and Shepard.

*The Story of a Yankee Boy. By Herbert Elliott Hamblen. Illustrated by Harry Edwards. 359 pp. New York: Charles Scribner's Sons.

†The True Story of Benjamin Franklin. By Elbridge S. Brooks. Illustrated by Victor A. Searles. 250 pp. $1.50. ——‡ Reuben's Hindrances. By Pansy. Illustrated. 292 pp. $1.25. Boston: Lothrop Publishing Company.

"Farthest North,"* and he has also described in a clear, concise way the construction of the ship *Fram* and the preparation of the entire equipment. Were this all of the book the reader would have a fairly comprehensive idea of the magnitude of Nansen's undertaking. But this is only the beginning of a narrative terse and graphic, in which the author describes the events of an expedition three years in length, and full of thrilling experiences. It is a fascinating recital and constitutes a valuable addition to the literature on the arctic regions. The appendix is also an interesting portion of the book. It is Captain Sverdrup's account of occurrences on the *Fram* after Nansen left it for the sleigh journey. The present edition of this work is in a single volume, and it contains many pictures which well illustrate the author's story.

The Caribbees and the Recent War.

If one would fully comprehend all that the results of the recent war may mean he should read "Cuba and Porto Rico with the Other Islands of the West Indies,"† by Robert T. Hill of the United States Geological Survey. This book is a comprehensive delineation of the geography of the Caribbees, their geology, fauna, flora, inhabitants, government, and their commercial interests, with interesting observations on the future of this part of the world. More space is given to Cuba and Porto Rico than to the other islands, but in every case there seems to be no very important fact wanting in this history. The volume is profusely illustrated with beautiful scenes of places interesting to tourists and with many portraits of the natives.

"The Cuban and Porto Rican Campaigns"‡ is the title Richard Harding Davis has given to the book founded on his magazine articles on the late war with Spain. Had Mr. Davis not already won a high reputation for brilliant and graphic descriptive writing this volume would certainly win for him the crown of laurel. It is a complete history of the struggle in Cuba and Porto Rico, of which the writer was a keen observer, and so full of life and spirit is it that the reader completely loses himself in the observations and experiences of the author. The book is copiously illustrated with reproductions of photographs taken by the author and by others, many of which did not accompany the magazine articles.

One of the most valuable historical works pertaining to the war with Spain is "The Santiago Campaign,"* by General Joseph Wheeler. The work begins with an account of his appointment as major-general, after which the writer gives a detailed history of the trip from Tampa Bay, the landing at Daiquiri, the plan of the campaign, the negotiations for surrender, the capitulation, the conditions at the camp at Montauk Point, and the mustering out, with a description of the city of Santiago and brief accounts of the generals engaged. Embodied in this history, which is written in a plain, straightforward way, are the official dispatches and newspaper reports pertaining to the campaign, and a list of the officers of the cavalry division who were present at the battle of Las Guasimas. The writer's position as commander of the cavalry division gives his work the weight of authority. A half dozen maps enable the reader to make a careful study of the events described.

A book of absorbing interest to the landsman, be he old or young, is "A Gunner Aboard the 'Yankee.'"† It is a simple narrative portraying life on board this cruiser from the time it was manned by members of the New York Naval Militia till these brave men received their discharge, and in it are also described events in which the ship and her crew were active participants. The book is copiously illustrated with pictures of scenes described, and several colored plates give an idea of the methods of communication between warships. Facts of importance are also included in the appendix.

Biography.

In a series of biographical works called "Heroes of the Reformation," is a volume on "Martin Luther"‡ by Henry Eyster Jacobs. The author's aim in writing the book was "to follow the growth of Luther into the position which has given him his fame and to describe that position with fairness." To accomplish this purpose he has divided the history of Luther's life into three periods. The first extends from 1483, the date of Luther's birth, to 1517, when the Ninety-five Theses were published. Then he takes up Luther's career as a Protestant from 1517 to 1522, and the remaining twenty-four years of Luther's life the author considers under the title "The Reformer." From every reliable source, autobiographical as well as biographical, the author has brought forth

* Farthest North. By Dr. Fridtjof Nansen. With an appendix by Otto Sverdrup, Captain of the *Fram*. Illustrated. 679 pp. New York: Harper and Brothers.

† Cuba and Porto Rico with the Other Islands of the West Indies. By Robert T. Hill. 429 pp. $3.00. New York: The Century Company.

‡ The Cuban and Porto Rican Campaigns. By Richard Harding Davis. Illustrated. 400 pp. $1.50. New York: Charles Scribner's Sons.

* The Santiago Campaign, 1898. By Major-General Joseph Wheeler. 386 pp. Boston and New York: Lamson, Wolffe and Company.

† A Gunner Aboard the "Yankee." From the Diary of Number Five of the After Port Gun. Edited by H. H. Lewis, late U. S. N. With introduction by W. T. Sampson, Rear-Admiral U. S. N. 327 pp. $1.50. New York: Doubleday & McClure Co.

‡ Martin Luther. By Henry Eyster Jacobs. 469 pp. $1.50. New York: G. P. Putnam's Sons.

facts which he has served up to his readers in a pleasant, lucid manner and which help the general reader to a full comprehension of the period of history covered by this great life. The illustrations, quaint and numerous, consist largely of portraits of eminent people of the period.

Mr. Jules Hoche is the author of a biographical work which he has denominated "The Real Bismarck."* In the preface there are psychological remarks designed to help the reader comprehend the character of Prince Bismarck, and at the same time they open many subjects for speculation and meditation. Bismarck's life both as a private citizen and as a public official the author has set forth in a lucid, interesting way, making skilful use of numerous incidents and letters to explain his attitude in regard to some of the acts of this great man. The translator, Mrs. Charles R. Rogers, has rendered the work into generally smooth and dignified English and the illustrator has done his share toward making this a valuable and attractive book.

Another work which deals with the career of Germany's greatest chancellor has for its title "Bismarck and German Unity."† As the title suggests, it is a biographical study and an exposition of an important period of German history, condensed but comprehensive, and written in clear, simple English. Busy readers will find this a convenient and an interesting book to have.

To the literature on the life of Shakespeare a contribution has been made by Sidney Lee.‡ It is a very complete narrative of the events of Shakespeare's personal history, with notes that refer the reader to the original sources of information. Several subjects not usually found in works on the dramatist are presented with clearness and precision and in treating of the sonnets the author gives in detail his reasons for denying their autobiographical character. A more extended genealogy of the Shakespeare family than is usual in works of this kind forms an interesting part of the volume, which also contains a very complete bibliography of the dramatist's works. The appendix also contains many interesting facts that a student of Shakespeare should know.

The life of Paul has been the theme of many books, but there are yet writers who find it a fertile subject for discussion. A new volume‖ by Dr. Orello Cone considers the history of Paul's life under three heads, "The Man," "The Missionary," and "The Teacher." From the meager verified facts, from tradition, and from Paul's epistles, he has pieced together the necessary details for an excellent biographical work and his exposition of Paul's teachings are based on the epistles. The smooth, dignified, literary style, as well as the theme, make this an attractive volume though every reader may not be able to subscribe to all the author has to say.

"The Hero of Erie"* is the title which James Barnes has given to a small volume containing a history of the life of Oliver Hazard Perry. The author has employed a simple, narrative style in recounting the brave deeds of one of our national heroes, and in the recital he has included many important incidents in our national history. The pictorial part of the book includes diagrams and reproductions of old engravings illustrating events in the life of Perry.

The subject of an interesting monograph is "Mr. Gladstone."† In this little work the writer, Sir Edward W. Hamilton, skilfully delineates the personality of Mr. Gladstone. His skill in debate and oratory, his great moral and physical courage, his attitude toward antagonists, his conservatism, the many-sidedness of his powers, his home life, and his religious beliefs are some of the topics the author considers in a sympathetic manner. The book is eulogistic but not too profusely so, and it makes very pleasant reading.

BOOKS RECEIVED.

AMERICAN BOOK COMPANY, NEW YORK, CINCINNATI, CHICAGO.

Park, J. G., A.M. Language Lessons. Including Composition and Inductive Grammar.
Sullivan, Christine Gordon, A.M., Ph.D. Elements of Perspective.
Needham, James G. A Reading Book of Nature Study.
Bailey, M.A., A.M. American Elementary Arithmetic.
Hornbrook, A.R., A.M. A Primary Arithmetic. Number Studies for the Second, Third, and Fourth Grades.
Payne, Frank Owen, M.Sc. Geographical Nature Studies. For Primary Work in Home Geography.
Barnes's National Vertical Penmanship. Nos. A, B, 1, 2, 3, 4, 5, and 6.
Ripley, Frederic H., and Tapper, Thomas. Natural Music Series. A Short Course in Music. Book Two. For Advanced Grades.
Guerber, H. A. The Story of the English. Eclectic School Readings.

C. W. BARDEEN, SYRACUSE, N. Y.

Gowdy, Jean L. Ideals and Programmes. 75 cts.

CRANE AND COMPANY, TOPEKA, KAN.

Inman, Colonel Henry. A Pioneer from Kentucky. An Idyl of the Raton Range. 75 cts.

RATON & MAINS, NEW YORK. CURTS & JENNINGS, CINCINNATI.

The Golden Text Book of the International Sunday School Lessons for 1899.
Epworth League Reading Course.
Everyday Science. Compiled by Arthur E. Chapman.
Withrow, W. H. Makers of Methodism.
Dryer, George H., D.D. The Founding of a New World.
Swift, Polemus Hamilton, D.D., Ph.D. The Star in the West.

---

*The Real Bismarck. By Jules Hoche. Illustrated. Englished by Mrs. Charles R. Rogers. 236 pp. $2.00. New York: R. F. Fenno & Company.

†Bismarck and German Unity. By Munroe Smith. 99 pp. $1.00.——‡A Life of William Shakespeare. By Sidney Lee. With portraits and facsimiles. 499 pp. $1.75.——‖Paul. By Orello Cone, D.D. 487 pp. $2.00. New York: The Macmillan Company.

*The Hero of Erie (Oliver Hazard Perry). By James Barnes. Illustrated. 167 pp. $1.00. New York: D. Appleton and Company.

†Mr. Gladstone. By Sir Edward W. Hamilton, K. C. B. 190 pp. $1.25. New York: Charles Scribner's Sons.

HEADACHE

Horsford's Acid Phosphate by its action in promoting digestion and as a nerve food, prevents and alleviates **headache** arising from a disordered stomach, or that of nervous origin.

The best remedy for **insomnia** and **dyspepsia.**

Pleasant to take.

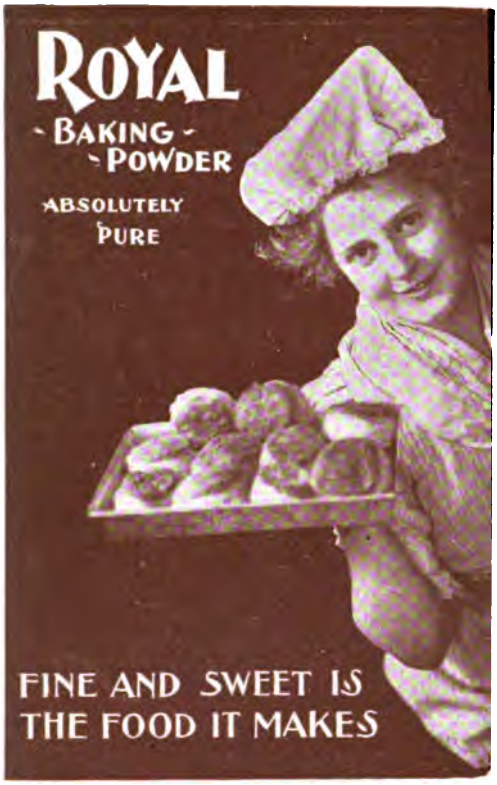
For sale by all Druggists.

POND'S EXTRACT;

not any other kind of an extract, but

Pond's, and Only Pond's.

Relieves all Pain.



ENAMELINE

THE MODERN
Stove Polish

PASTE, CAKE
OR LIQUID.

The only up to date Stove Polish in the market.

J.L. Prescott & Co New York.

SAPOLIO
is a friend that will wear itself out in your service

Take no Substitutes
ENOCH MORGAN'S SONS CO.

Title page

THE CHAUTAUQUAN

MARCH

A.D. 1899

HARVARD COLLEGE
MAR 2 1899

DR. THEODORE L. FLOOD, EDITOR, MEADVILLE, PA.

VOL. XXVIII. MARCH, 1899. NO. 6.

THE CHAUTAUQUAN

A MONTHLY MAGAZINE.

.....CONTENTS.....

Hon. Lewis Miller ..... *Frontispiece*
Maj.-Gen. Guy V. Henry..... *Frontispiece*

REQUIRED READING.

The City of Manchester. Illustrated..... *E. A. Davies.* 531
The Textile Industries of the United States..... *Henry G. Kittredge.* 538
John Bright..... *Prof. Carl Evans Boyd, Ph.D.* 541
The True Motive in the Christian Life..... *Ezra Hoyt Byington, D.D.* 545
Recent Progress in Physical Science..... *Prof. L. H. Batchelder, A. M.* 550
The Liquor Interests in English Politics..... *Edward Porritt.* 554

GENERAL READING.

Effect of Invention upon Labor and Morals ..... *Edward C. Williams.* 559
Misogamy and Its Causes..... *Richard Mulckow.* 565
The Underground Railway of Boston. Illustrated..... *Jane A. Stewart.* 568
The Barrys. A Story. Chapters XII.–XV..... *Shan Bullock.* 577
Cyrano de Bergerac, the Man..... *G. P. Mancini.* 595
The Dreyfus Affair and French Public Opinion..... *H. R. Chamberlain.* 600
Cocaine and Its Use in Surgery..... *A. Dastre.* 604

HISTORY AS IT IS MADE.

Ratification of the Peace Treaty; A Battle with Filipinos; Colonial Administration; Court-martial of General Eagan; The Army Beef Scandal; Diplomatic Changes; Samoan Complications; Senatorial Elections; Legislation in Congress; In Great Britain and France; Other Foreign Affairs; Church Interests; Nelson Dingley; The Death List. Illustrated..... 609

C. L. S. C. WORK.

C. L. S. C. Outline and Programs..... 617
Syllabus of C. L. S. C. Reading..... 618
The C. L. S. C. Classes..... 624
Local Circles..... 626
Chautauqua Young Folks' Reading Union..... 634
The C. L. S. C..... 636
The C. L. S. C. Class of 1902..... 638
C. L. S. C. Graduate Courses..... 640
The Chautauqua Season of 1899..... 642

Talk About Books..... 629

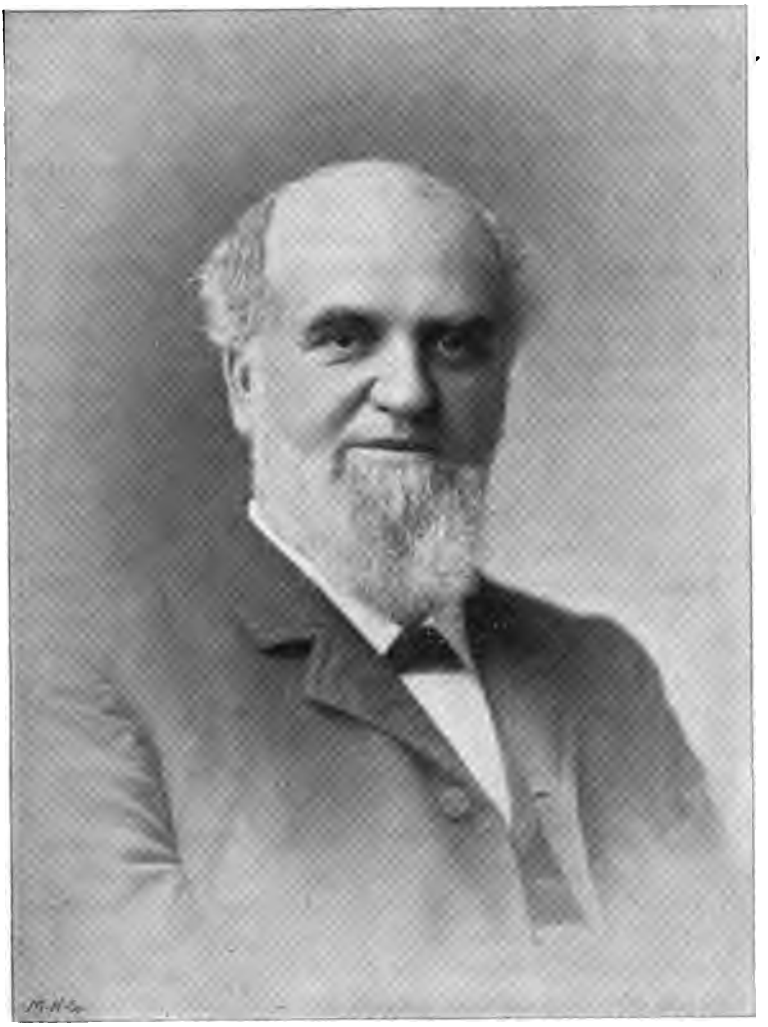
DR. THEODORE L. FLOOD, Editor and Proprietor, Meadville, Pa.

NEW YORK, Bible House.
LONDON, Kegan Paul, Trench, Trübner & Co., L't'd, Paternoster House, Charing Cross Road, W. C.
DUNDEE, SCOTLAND, Rev. Donald Cook, 6 Albany Terrace.

Entered According to Act of Congress, March, 1899, by THEODORE L. FLOOD, in the office of the Librarian of Congress, Washington, D. C.

Yearly Subscription, $2.00.

MAJOR-GENERAL GUY V. HENRY, MILITARY GOVERNOR OF PUERTO RICO.



Lewis Miller

Late President of the Board of Trustees of the Chautauqua Assembly.

See next page.

HON. LEWIS MILLER.

HON. LEWIS MILLER, of Akron, Ohio, co-founder with Bishop John H. Vincent of the Chautauqua Assembly, died in New York, February 17. For several years Mr. Miller had resisted the advances of failing health, and after an acute illness of a fortnight, during which he was confined at his home in Akron, Ohio, it was decided by his physicians that resort must be had to a surgical operation for kidney disease. To this end Mr. Miller at once started for New York but was delayed nearly two days in reaching his destination by reason of the severe storms which swept the country at this time. The rigors of the prolonged trip drew heavily upon his vital forces and increased the danger of his treatment. The operation was performed at the New York Post-Graduate Hospital, but he was unable to rally from the exhaustion which followed.

Lewis Miller was born in Greentown, Ohio, in 1829. He learned the plasterer's trade, and later opened a machine shop in Canton, Ohio. He soon turned his attention to the invention of agricultural machinery, and became one of the pioneer inventors of the machines which revolutionized the farming industry. He was the inventor of the Buckeye Mower and Reaper, as well as other agricultural machines. Out of his initiative grew several of the largest establishments in the country concerned with the manufacture of agricultural implements.

Mr. Miller was a member of the Methodist Episcopal Church and in the Sunday-school work of this denomination gained a wide reputation as a leader. For a long period of years, up to the time of his death, he was the superintendent of the Sunday-school of the First M. E. Church in Akron, which for its system and building became the model followed by large numbers of churches of all denominations throughout the country.

From the beginning in 1874 Mr. Miller retained his intimate connection with Chautauqua, continuously serving as the president of the Board of Trustees during this long period. He was a familiar figure at Chautauqua, where each summer he spent much time, aiding by his counsel and business initiative in the making of the greatly diversified institution which the one word Chautauqua describes to-day.

The death of Lewis Miller removes the central figure from a home in which the family ties were beautifully intertwined and from which his loss will be felt, and especially at this time, as most keen and irreparable. It was in the early summer that Theodore, the youngest son of Mr. and Mrs. Miller, a member of the Rough Riders Regiment, died from the result of a wound received in the fight at La Quasina, Cuba, and it was in November last that the death of the eldest daughter, Mrs. Richard P. Marvin, occurred at her home in Akron. Mr. Miller is survived by his wife and eight children. Of the daughters, Misses Mary and Grace Miller are at home in Akron, and the remaining daughter is the wife of Thomas A. Edison, the inventor. Of the sons, Messrs. Ira M. and Edward B. are in business in Akron, Robert A., who is a member of the Chautauqua Board of Trustees, was recently appointed United States postmaster at Ponce, Puerto Rico, where also Lewis, Jr., is in business, and John V., who was in the naval service during the war with Spain, is now a graduate student in Cornell University.

The remains of the deceased were conveyed from New York to Akron on February 18, where they remained in state in the First M. E. Church during the next day, Sunday. The funeral services, at which Bishop Vincent assisted, were held at Oak Place, the family residence in Akron, at 1 p. m. on Tuesday, February 21, and at 4 p. m. of the same day the First M. E. Church, where public services were held, was filled with a large congregation of friends and associates from home and abroad to pay their last tribute to the departed. This brief sketch is inserted in this number of THE CHAUTAUQUAN on the eve of its publication, more extended reference to the life and career of the deceased being necessarily left to a future number.

THE CHAUTAUQUAN.

VOL. XXVIII. MARCH, 1899. No. 6.

HARVARD COLLEGE LIBRARY
MAR 2 1899
CAMBRIDGE, MASS.

OFFICERS OF THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

JOHN H. VINCENT, *Chancellor*, 613 Mooney Building, Buffalo, N. Y. All "personal" letters should be so marked on envelope. LEWIS MILLER, *President*. JESSE L. HURLBUT, *Principal*. *Counselors:* LYMAN ABBOTT, D. D.; BISHOP H. W. WARREN, D. D.; J. M. GIBSON, D. D.; W. C. WILKINSON, D. D.; EDWARD EVERETT HALE, D. D.; JAMES H. CARLISLE, LL. D. MISS K. F. KIMBALL, *Executive Secretary*. A. M. MARTIN, *General Secretary*.

REQUIRED READING FOR THE CHAUTAUQUA LITERARY AND SCIENTIFIC CIRCLE.

THE CITY OF MANCHESTER.*

BY E. A. DAVIES.

THE VICTORIA BUILDINGS.

AMONG the cities of England Manchester has many claims to distinction. Its origin, like that of a favorite character of Thackeray, is "lost in the mists of antiquity." There is substantial evidence that it was a Roman station of some importance, but going farther back still there was a floating tradition as late as the seventeenth century that Tarquin, an enemy of King Arthur, kept the castle and was killed by that mythical hero of Tennyson, Launcelot of the Lake. Nearly the only point of certainty in its history before the Conquest is that it suffered greatly from the devastations of the Danes, and that in 923 Edward, who was then at Thelwall, seventeen miles away, sent a number of troops to repair and garrison it. A visitor to-day would not suspect it of possessing such a record.

It is essentially a modern commercial city, grim with the dust and spent vapors of

*The Notes on the Required Reading in THE CHAUTAUQUAN will be found following those on the books of the course, in the C. L. S. C. Department of the magazine.

PICCADILLY.

a thousand industries, and palpitating with business life and activity. As the great center of cotton manufacture it has a peculiar interest for Americans, for with no other city of England, commercially speaking, are we brought more directly in touch. It is frequently spoken of as the second city of the empire, and in wealth, enterprise, and influence it probably is, but if the claim is to rest on population it will be necessary to couple with it the adjoining borough of Salford, divided from the city by the river Irwell, a comparatively narrow and unimportant stream, which loses its identity ten or twelve miles away by falling into the Mersey. Manchester and Salford are practically one community, and regarding them as such the population may be roughly estimated at three quarters of a million. To this total Manchester contributes 540,000.

There was nothing very eventful in the history of the city during the first few hundred years after the Conquest. Under the protection of the barons, who practically ruled the land in these days, the place appears to have steadily increased in prosperity and it early became an important seat of the textile manufactures. Fulling-mills were at work in the thirteenth century and documentary evidence exists to show that woolen mills were carried on at that period. An act passed in the reign of Edward VI. regulates the length of cottons. These, notwithstanding their name, were probably all woolen textures. It is thought that some of the Flemish weavers who were introduced into England by Queen Phillipa of Hainault were settled in Manchester,

THE TOWN HALL.

and an old author gives a quaint and picturesque description of the manner in which these artisans were welcomed by the inhabitants of the country they were about to enrich with a new industry, one which in after centuries has become perhaps the most important industry in the country and one in which, as already indicated, America has a peculiar interest. From cotton the Manchester people turned to Irish linen yarn, weaving it and returning it for sale in a finished state. They also bought cotton wool from Smyrna.

From these small beginnings the great trade of Manchester grew to its present proportions. Cotton considerations dominate everything in the city and the populous towns in the immediate vicinity, and with cotton the politics of this part of the country are largely associated. The "Manchester School" of economists and free traders is still a powerful element in the legislature. The anomalies existing in the parliamentary system of representation at the beginning of the present century led to considerable discontent, and protests were raised by the operatives that while single individuals in some portions of the country had the power to return members of Parliament, a great town like Manchester was entirely without representation. This led to open-air meetings, which were foolishly regarded by the authorities. The culmination was the "massacre of Peterloo," as it is termed. This was in 1819, when an immense crowd assembled in St. Peter's Fields, now the site of one of Manchester's most historic buildings, the Free Trade Hall, in which all the great statesmen and orators of the past two generations have been heard. The authorities had the Riot Act read, but in such a manner that it was quite unheard by the mass of people, and drunken yeomanry were turned loose upon the unresisting spectators. The yeomanry appear to have used their sabers rather freely. Several people were killed and many more injured. After the passing of the Reform Act of 1832 Manchester became an important political center, and the agitation for the repeal of the corn laws had its headquarters there.

THE CATHEDRAL.

A striking incident in the history of the city is its connection, as the great distributing center of relief, with the disastrous cotton famine of the early sixties. In consequence of the secession of the Southern States from the Union in 1860–61 the

THE SHIP CANAL—EASTMAN LOCKS.

supply of cotton from North America nearly ceased. A warning as to the danger of trusting to this source had been given by a prominent Manchester merchant, Sir Thomas Bagley, as he was afterward known, as early as 1852, and in 1862 he stated that through the failure of supply the loss of the laboring classes was twelve million pounds sterling a year and estimated the loss, including the employing classes, at nearly forty millions a year. The relief fund, which was immediately organized, proved the most remarkable of its kind that has ever been established. At a meeting of noblemen and gentlemen in London in July, 1862, £10,000 were subscribed, including £1,000 from the viceroy of Egypt, who was then in the English metropolis, and £2,000 from the queen. Subscriptions flowed in from all quarters of the world and funds grew to extraordinary proportions. Immediate relief was necessary, as was shown by the fact that two months after the opening of the fund aid was being given to 163,498 persons. North America sent over in the *George Griswold* a large supply of provisions, etc., as well as monetary aid. The famine continued for two years or more, and during that time the Central Committee in Manchester expended nearly a million. The total sum subscribed from various sources was £1,773,647.

Although the spinning of cotton and the manufacture of various fabrics from the article are the staple of the Manchester district, there are also calico-printing works of great magnitude in a wide circuit of the city, and the warehouses established in the city in connection therewith are of corresponding extent. Bleach and dye-works also find employment for numerous hands, while an enormous amount of capital is invested in what is known as the "home trade," small wares comprising an infinite variety of articles. There are also many chemical and engineering works and paper-mills.

Manchester is not exactly what one would call a picturesque city. It is gradually removing the ground for the reproaches repeatedly hurled against it for its lack of taste in architecture, but there is a great deal yet to be done. There is plenty of scope for a modern Baron Haussman. Still the city possesses many fine public buildings and two or three fine thoroughfares and squares. Nearly in the center of the city is Albert Square, in which stands the handsome town hall, the finest building in the city. It is of Gothic architecture, presenting many characteristics of the Early English period. It was erected to the designs of Mr. Waterhouse at a cost of a million sterling. It is triangular in form

and contains a triangular courtyard in the center of the building. The main entrance is under the central tower, which is 260 feet in height and contains, as will be seen by the illustration, a clock with which is connected a fine set of bells. The interior is spacious and impressive, and contains handsome state apartments, a sculpture hall with a floor of white marble mosaics bordered in red and black upon stone; a fine hall for public assemblies decorated with priceless frescoes by Madot Brown, illustrating the history of the city; a council chamber and mayor's parlor. The building is one of the most spacious and elegant structures in Europe and is probably the largest in the world devoted to civic purposes.

The square in which it stands contains several fine statues, most conspicuous of which is the handsome marble presentment of the late Prince Consort, occupying the place of honor fronting the main entrance hall. In one corner of the square is an unpretentious building labeled "Memorial Hall," erected as a mark of respect to the ministers of the Church of England, who in the troublous times of 1662 resigned their livings or were expelled from them for refusing at the dictates of their conscience to subscribe to the Act of Uniformity.

The Manchester Royal Infirmary is the greatest of the charitable institutions of the city. It is a striking building of Grecian architecture, situated in the broadest thoroughfare of the city, Piccadilly. In front of it is a broad esplanade on which there are massive bronze statues of Wellington and Sir Robert Peel, and others of smaller dimensions. Just now the citizens are discussing the desirableness of pulling it down and rebuilding it on the present or some other site, or purchasing it as a site for a free library. The trustees and the corporation are at present at a deadlock. The price asked is naturally tremendous, and with the heavy burdens at present lying upon them in connection with the great water scheme by which the city is supplied from Lake Thirlmere, seventy miles away in Westmoreland, and the burden of a heavy investment in the ship canal—a gigantic undertaking upon which more than £15,000,000 have been expended—the ratepayers regard the proposed purchase with anything but sympathy.

THE SHIP CANAL—ENTRANCE AT EASTMAN.

THE EXCHANGE.

The existing city art gallery is not by any means a mean-looking building, but with the large and valuable permanent gallery, which grows each year by virtue of an obligation upon the corporation to spend each year on art a sum of £2,000, it is utterly inadequate for the frequent exhibitions that are given, just as it was to accommodate the school of art, which is now located in a handsome and commodious building a mile from the center of the city. The existing "gallery" was erected by public subscription in 1830 from designs by Sir Charles Barry. It is of the Grecian style of architecture and is generally admitted to be one of the finest specimens of this class of art in the United Kingdom.

Manchester's chief educational institution is Owens College, named after its founder, John Owens, a successful Manchester merchant who bequeathed his estate for charitable purposes. The original building has been added to considerably, largely by munificent benefactors from the trustees of the late Sir Joseph Whitworth, of the great engineering firm, and there are now a series of buildings in stone covering a large space of ground. The college staff consists of twenty-eight professors, thirty-six lecturers, and thirty-eight demonstrators and assistant lecturers. The students number over a thousand and include four hundred medical and one hundred women students. Together with the University College of Liverpool and Yorkshire College, Leeds, Owens College forms the Victoria University, a de-

THE ASSIZE COURTS.

gree-granting body of which the Duke of Devonshire is chancellor.

A picturesque block of buildings is that in which the assizes are held. This is situated a mile or so from the town hall, in a district largely inhabited by Jews. The architecture is of the Early English and decorated Gothic style. Within the building are a criminal court, a civil court, a chancery court, and the judges' lodgings; in the rear is the county jail, in which many notorious criminals have been executed. The Manchester Royal is a magnificent building at the foot of Market Street, the busiest part of the town. The main entrance is a strikingly effective portico approached by a broad flight of steps. The "great room" in which the cotton lords of the city and the neighboring manufacturing towns assemble each day, and in larger numbers than usual on market days, Tuesdays and Fridays, has a floor space of over 4,400 square yards, with an immense central dome over 125 feet in height. It is the largest room in the country which is entirely given up to commerce. The subscribers number something like 8,000. No celebrity who visits Manchester is allowed to miss "high change," a sight which the visitor is shown from a small gallery. The writer can recall a particularly cordial reception accorded to General Grant on his visit to Manchester. In addition to the Royal Exchange there are less pretentious buildings devoted to the coal trade, the stockbrokers, and cotton waste dealers.

The Cathedral of Manchester is not a credit to Manchester. It has been tinkered at for years and years and the workmen are at this moment finishing the decoration of a new ornamental front. It has been patched and added to at an expense that would almost have built a new cathedral. A scheme of renovation has been carefully followed, however, and the result is that the building is very similar to what it was at the close of the sixteenth century. It was commenced early in the fifteenth century by the first warden, Sir John Huntingdon. Near by is the Chetham Hospital, unquestionably the most interesting relic in Manchester. A splendid relic of medieval architecture, it has a noteworthy history. Here the barons of Manchester ruled with an iron hand in former ages; here Cromwell's troops held fast the captive Chartists. In the seventeenth century Humphrey Chetham, a prosperous merchant, left money for the purchase of the old building as a residence for forty poor boys to be trained and educated to take a useful part in life. The noble charity is in existence to-day and the endowment left by the pious founder is now ample to provide for one hundred boys. Among the other prominent buildings of the city is the post-office. This is almost hidden away off Market Street. It is a solid building of the Italian style, designed obviously more for business purposes than ornament. No post-office in the kingdom outside of London transacts as much business.

The ship canal to which reference has already been made is steadily making progress. Traffic is steadily increasing, and shares are rising in the same ratio. It has been the cause of a large amount of friction between Liverpool and Manchester. Liverpool people derided it, of course, as a "ditch" and have not yet overcome their feelings at an undertaking designed with the express purpose, as they conceive, to damage their trade. Results so far have shown that the canal is likely to become the great public benefit its promoters declared it would. Manchester is at present more prosperous than it has been for many years, and in a great measure it is due, as the lord mayor of the city said the other day, to the canal, and to the new industries and shipping brought by the waterway.

As indicating the extent of the corporation's work it may be mentioned that there are seventeen standing committees which meet usually once a fortnight, and various sub-committees and special committees. They collect in respect of city rates over £850,000 a year and disburse that sum through their various channels. They employ upwards of 8,400 persons and pay in salaries and wages over £617,000, or £11,880 per week.

THE TEXTILE INDUSTRIES OF THE UNITED STATES.

BY HENRY G. KITTREDGE.

THE textile manufactures of the United States are practically limited to the products of wool, cotton, and silk, arranged in the order of their value, those of flax, jute, hemp, etc., being relatively insignificant, and of so little consequence in the census of 1890 that no specific status was given to them. Notwithstanding the fact that the productive capacity of the woolen industry of this country has increased nearly thirty-four per cent, the value of its manufactured product is about the same as it was in 1890. The same thing applies to the cotton industry, the productive capacity of which has increased since that time thirty-six per cent, and the value of its manufactured product decreased over four per cent. Therefore the gross value of manufactured products of these two leading textile industries is less now than it was nine years ago, due to the great decline in the market price of the goods made. A somewhat different condition affects the silk industry, which has made great strides since 1890 by increasing its output of goods seventy-four per cent and the value of its manufactures nearly forty-four per cent.

The geographical distribution of textile mills is about the same now as in 1890, being chiefly confined to the New England States, other than Vermont, the three states of Pennsylvania, New York, and New Jersey, and the three Southern States of North Carolina, South Carolina, and Georgia, these latter being within what is known as the Piedmont cotton manufacturing district. The states west of the Mississippi River and east of those on the Pacific have not yet given up their distinctive character as agricultural and pastoral states.

In only one respect does the woolen industry lead all others in the textile line, and that is the value of the goods made. In amount of capital employed, number of employees, and amount of wages paid, it stands second to the cotton industry. Wool manufacturing in this country is of small importance outside of New England and the three states of Pennsylvania, New York, and New Jersey, where the principal feature of its development is in the direction of finer spinning for worsted fabrics for men's and ladies' wear, to meet the prevailing fashion for goods of this kind. The progress made in the three states of Massachusetts, Rhode Island, and Pennsylvania has been particularly marked in this particular, with every prospect of its continuing for years to come.

Much of the fine-spun yarns of these states are found in the goods woven in other states as well, greatly changing and improving the character of American manufactures, as was observed at the World's Columbian Exposition, where they compared more than favorably with those exhibited from the looms of foreign countries. In fact, they excited the admiration of foreign experts, who pronounced them in their reports equal to similar goods made anywhere in Europe. The high standard of perfect fabrication and style that was seen in individual exhibits at that time is not general in American wool manufactures, as it would not pay. Our manufacturers find it more to their profit to make goods for the masses than for the fastidious few who patronize the custom tailor. But while this is so, as a rule, it is nevertheless true that there are goods for men's wear, of worsted, made in this country by a few mills, that are equal to foreign makes, and for which they are oftentimes sold by fashionable tailors. For the general class of people, American woolens, taken as a whole, are superior to those manufactured abroad; and this, with the other fact that with us garments are cast off before they are so thoroughly worn out or patched up as among Europeans, makes our people the

best dressed of any in the world. This was curiously evidenced between 1894 and 1897, when foreign woolen rags were admitted into the United States free of duty. Many of these importations consisted of fragments of garments that were worn and patched to the utmost, far more than is ever seen among those picked up in this country. Foreign rags, as a consequence, are much inferior to those collected here, for conversion into shoddy, etc.

American woolen manufacturers labor under the disadvantage of being obliged to confine the quality of their fabrics chiefly to the peculiar characteristics of our domestic wools, being largely debarred from other desirable selections on account of customs tariff restrictions. No loss, however, is incurred in the production of meritorious and durable fabrics, but a limitation is placed upon a diversified manufacture, especially of the finer qualities and such requiring a softness of feel. With a slight degree of queerness, all of the finest American goods, in quality, color, and attractiveness, at the Columbian Fair were made from wool grown outside of this country. Still there is no better wool, for healthiness of staple and for strength and elasticity of fiber, raised in the world than the merino variety grown east of the Mississippi, especially in Ohio and western Pennsylvania and contiguous territory.

The year 1898 was a season of disappointments to woolen manufacturers, and in order to circumvent the depressions of trade, certain freaks and frauds were allowed to appear in American manufactures that cannot be viewed with complacency as reflecting credit upon the industry; and these were the manufacture of what were designated in the trade as cotton worsteds, or goods made of ninety per cent or over of cotton and only a small percentage of wool. Those who first marketed such fabrics made money, but when the deception became more or less general they were repudiated except at very low and unprofitable prices. An attempt was here made to perpetrate a fraud to meet the views of consumers as to price, which, for the genuine, all-wool article, had gone up because of the natural and also artificial advance in the price of the raw material, the latter due to the imposition of impost duties. Fabrics of this kind, however, are not to be taken as characteristic of American manufacture.

Still this episode in our woolen manufacture presents an instance of the advanced state of the art of dyeing cotton, so that this vegetable fiber can be so assimilated to wool in color that it can be blended and escape superficial detection.

A little over one fourth of the world's consumption of cotton is by the mills of the United States, and nearly the whole of it is for goods for domestic use. But a very small proportion of the cotton goods made in this country is exported; that is, of the 1,600,000,000 pounds of cotton consumed in the year ending August 31, 1898, only 100,000,000 pounds were exported in the shape of goods, or about 6.2 per cent. This shows the capacity and desirableness of the American market, which also absorbed in addition, for the above period, foreign cotton manufactures to the extent of one sixth more. The latter, however, were of the finer qualities, and of such goods as laces, edgings, embroideries, hosiery, etc. Over one tenth of the value of cotton manufactures consumed in this country are of foreign make, largely from the factories of Germany, Switzerland, France, and Great Britain. The American people annually consume cotton fabrics, on the estimate for 1898, to the value of $290,000,000, or about $4.00 per capita. In quantity their purchases are sixteen per cent more liberal than they were in 1890.

American cotton goods are esteemed for their intrinsic worth wherever they are marketed. They are honestly made, with no unnecessary weighting with extraneous substances, which characterize many of those made abroad, especially those intended for the export trade with South American and Asiatic countries. Our manufacturers have not felt the keen necessity of soliciting a foreign trade, as is the case with those of England, for instance, as the

normal demand of our nearly 74,000,000 people is sufficient to keep our cotton spindles profitably employed. The depression that has of late disturbed the cotton manufacturing industry is traceable to causes other than a lack of a demand for goods. The importance, however, of establishing and keeping open profitable avenues to foreign trade is not to be underrated in the least, as the greater the number of markets, and the wider the field of trade, the more prosperous is the industry affected likely to be. With us, this applies with special force to our manufactures of coarse goods, that are made in some of the New England mills, but more abundantly in those of the South.

In 1890, the consumption of cotton per capita of population, for the domestic supply of goods, was 17 pounds; while in 1898 it was 20.3 pounds. This is a gratifying exhibit of a healthy growth of the industry in meeting a home demand. To satisfy the foreign as well as the home demand, the consumption was 17.7 pounds in 1890, and 21.5 pounds in 1898. But it is in the tendency toward a finer and higher grade of manufacture that we find the greater amount of gratification in the progress made by the industry. This upward march is due quite as much, if not more, to domestic competition, as to anything foreign. The New England mills are diversifying their products on the better lines of manufacture, and leaving to the southern mills the lower grades of goods. The mills of Massachusetts lead in the amount of machinery for the production of fine yarns, though in fineness of fabrics other states are equally entitled to the palm. The South, however, is not to be contented with the manufacture of the coarser qualities of yarn and goods. Already it has entered the field for the production of fine fabrics with fancy weaves, and arrangements have just been consummated to fill one of the mills there with combing machinery for spinning fine yarns from long-stapled cotton.

The newest thing in American, as well as in foreign, cotton manufacture is that treatment of the yarn or fabric technically known as mercerizing, which imparts to it a glossy or silky appearance. Goods are thus made having the semblance of those made from silk, requiring close, and almost expert, inspection to tell the difference. Discovery and invention enter into the methods for effecting this result, due to the physical and chemical changes wrought by the action of caustic soda or potash upon the cotton fibers in the yarn or goods, while under tension. The effect of the caustic alkali was the discovery of John Mercer, and was regarded with much curiosity as long ago as the London exhibition of 1851. Commercially speaking, this discovery remained valueless in the manufacture of cotton fabrics till the very recent inventions of mechanical methods for holding, and permanently setting, the tension of the goods while under chemical treatment. Cotton fabrics that have been mercerized are sold under various fancy names, as silkaline, etc., and possess many points of merit besides their silky appearance—which is lasting—and greater strength, and wearing qualities. So very novel are these fabrics to the trade that little was known of them at the time of framing the customs tariff act of 1897, else special and comparatively high rates of duty would have been applied to their importation. Their sudden and unexpected advent from foreign quarters nonplused the customs officials at first, and their proper classification for duty became a question of much uncertainty. This silkified cotton yarn is meeting a demand for embroidery purposes, and for dress goods for ladies' wear, and for upholstery uses. It is destined to come into strong competition with silk, at a very much less cost.

The silk industry of the United States is of rapidly growing importance, though, for the present, chiefly confined to the states of New Jersey, New York, Pennsylvania, Connecticut, and Massachusetts. All of the products of our mills practically enter into the home consumption. Only one third of one per cent is exported. American silks are growing in popular estimation for their real worth in wear and appearance, and are to be found in great variety in color and

fabrication, though they have not yet reached the highest mark of foreign manufacture. We find in this, as in the other textile industries, a disposition to manufacture for the masses rather than for the few. In this respect, it is not what can be done so much as what is best to be done to bring in the greatest profit. Our mills make, besides some goods that are rich in design, quality, and style, all kinds of novelties, broad silks, dress goods, millinery goods, underwear, handkerchiefs, ribbons, tie silks, tapestries, brocades, chenilles, satins, velvets, plushes, fringes, threads, yarn, cords, etc., etc.

JOHN BRIGHT.

BY CARL EVANS BOYD, PH.D.

PROFESSOR OF HISTORY AND POLITICAL SCIENCE IN CORNELL COLLEGE.

IN the history of Great Britain during the nineteenth century two facts have been especially conspicuous. On the economic side Great Britain has become more and more an industrial nation, and on the political side it has become more and more democratic. The legislation in which these changes are reflected is closely associated with the name of John Bright. When Bright died, Gladstone said of him in the House of Commons: "Mr. Bright has been, in a very remarkable degree, happy in the season of his removal from among us. He has lived to see the triumph of almost every great cause—perhaps, I might say, of every great cause—to which he had especially devoted his heart and mind." This is but another way of saying that Bright was in line with the tendencies of the century. But he was not a follower of popular fancies. Although the measures which are most commonly associated with his name are now regarded with such general approbation as to make it hard to conceive that they were ever opposed, there was a time when their advocates were regarded as demagogues and among the foes of peace and order. This was the view taken of Bright during a large part of his career.

The outward circumstances of Bright's life can be narrated in a few words. He was born in 1811 at Greenbank, near Rochdale in Lancashire, a county in which were born three of Her Majesty's prime ministers —Sir Robert Peel, Gladstone, and Edward Stanley, fourteenth Earl of Derby. He was the son of Quaker parents, and he himself clung to that faith throughout his long life. Delicate health made protracted study injurious for him, and when fifteen years old he left school to enter his father's counting room. During his young manhood he made speeches to his neighbors upon such subjects as temperance, education, and church rates. In 1843 the city of Durham elected him to Parliament, where he remained with few interruptions for forty-five years. In 1847 he was elected for the city of Manchester. Defeated in 1854 on account of his opposition to the Crimean War, he was returned in 1857 by the city of Birmingham, which he continued to represent in the House of Commons until his death. In 1868 he became president of the Board of Trade in Gladstone's ministry. In 1873 and again in 1881 he was chancellor of the duchy of Lancaster. In 1882 he left the cabinet on account of Gladstone's Egyptian policy, and later he was opposed to Gladstone's home-rule policy. He died March 27, 1889.

The experiences of the early years of Bright's life did much to determine the course of his political career. His father, as a good Quaker, refused to pay the taxes imposed for the support of the established church. The officers therefore levied upon his merchandise and sold enough of it to satisfy the tax. These scenes made a deep impression upon Bright, and in later life his strenuous opposition to the church rate was based not only upon conviction, but upon a sense of personal wrong. At

Manchester, in his boyhood, had taken place the Peterloo massacre, when a meeting of advocates of parliamentary reform was dispersed by the militia and many lives lost. All about him, in the manufacturing district of Lancashire, Bright saw the misery produced by the oppressive corn laws. These events and scenes enlisted Bright's sympathies in the two measures with which his career is most conspicuously identified —the repeal of the corn laws and the extension of the franchise.

In the course of his local discussion of public questions, Bright first came in contact with his great co-worker, Richard Cobden. Bright invited Cobden to come to Rochdale and deliver an address at an educational meeting. He came and was so impressed with the speech made by Bright upon that occasion that he asked his assistance in the struggle for the repeal of the corn laws. The circumstances under which Bright finally took up this cause can be best described in his own words:

> At that time I was at Leamington, and I was, on the day when Mr. Cobden called upon me—for he happened to be there at the time on a visit to some relatives—I was in the depth of grief, I might almost say of despair, for the light and sunshine of my house had been extinguished. All that was left on earth of my young wife, except the memory of a sainted life, and of a too brief happiness, was lying still and cold in the chamber above us. Mr. Cobden called upon me as his friend, and addressed me, as you might suppose, with words of condolence. After a time he looked up and said, "There are thousands of houses in England at this moment where wives, mothers, and children are dying of hunger. Now," he said, "when the first paroxysm of your grief is past, I would advise you to come with me, and we will never rest until the corn law is repealed."

From this time forward, Cobden and Bright labored together for the attainment of their object. The two men were well qualified to supplement each other in their work. The one supplied what the other lacked. Cobden had not the eloquent persuasiveness of Bright. He could not arouse men to action by the fervor of his oratory. On the other hand, Bright lacked Cobden's argumentative power—the cold, calm reasoning which appealed most of all to hard-headed men of affairs. The two men together were irresistible. Even Kinglake, who had little sympathy with their political opinions, said of their power, "They had shown that they could arouse and govern the assenting thousands who listened to them with delight—that they could bend the House of Commons—that they could press their creed upon a prime minister, and put upon his mind so hard a stress, that after a while he felt it to be a torture and a violence to his reason to have to make a stand against them."

England has nearly always imposed duties upon the exportation and importation of grain. The export duties were abolished early in this century, but the import duties were retained. Usually the rate was adjusted according to the price of corn. The higher the price the lower the rate, because there was the less need for protection for the English farmer. In 1815 the most burdensome rate was fixed. Importation was to be free only when the price of grain reached eighty shillings a quarter. This was the law to which the distress of the poor in the manufacturing districts was due. In 1828 it was somewhat modified, and a duty of one shilling was imposed when the price was seventy-three shillings or above, while the duty rose to twenty-three shillings eight pence when the price declined to sixty-four shillings. In 1842 the law was further modified by the enactment of the "sliding scale." When the price of corn was seventy-three shillings or more, there was a duty of one shilling. But when the price of corn fell, one shilling was added to the duty for each decrease of one shilling in price, until a maximum duty of twenty shillings was reached.

As the manufacturing interests grew, the corn laws became more and more burdensome, and a movement for their repeal was begun. Associations for accomplishing this purpose were organized, the most important and effective of which was the Anti-Corn Law League. In this league Cobden and Bright were the leading spirits. The repeal movement at once acquired great strength among the people, but in

Parliament it had many obstacles to overcome. Here the landed interests were entrenched, and the prime minister, Sir Robert Peel, was pledged to protection. When Parliament adjourned in 1845, the league seemed to be losing in strength and influence, but another event, totally unconnected with politics, changed the whole situation. In the words of Bright, "Famine, against which we had warred, joined us." In the fall of 1845, the potato rot began in Ireland. For some time Sir Robert Peel had been tending toward free trade, and the necessities of Ireland completed his conversion. Cabinet councils were held, and the repeal of the duties discussed. When the prime minister found that his policy of repeal would not receive the support of his ministry, he resigned, and Lord John Russell, the leader of the opposition, who had already announced his conversion to the principles of the league, was invited to form a new ministry. Being unable to do so, the queen was obliged to ask Sir Robert Peel to remain in office. When the repeal bill was introduced into Parliament, Bright made one of his greatest speeches. In the course of it he defended Peel from the attacks made upon him because of his change from protection to free trade.

> You say the premier is a traitor. It would ill become me to attempt his defense after the speech he delivered last night—a speech, I will venture to say, more powerful and more to be admired than any speech which has been delivered within the memory of any man in this house. I watched him as he went home last night, and, for the first time, I envied him his feelings. That speech has circulated by scores of thousands throughout the kingdom and throughout the world; and wherever a man is to be found who loves justice, and wherever there is a laborer whom you have trampled underfoot, that speech will bring joy to the heart of the one, and hope to the breast of the other.

Twenty years later Bright was able to say that since the repeal of the corn laws more than 500,000,000 pounds' worth of goods which that law was intended to exclude had been imported into England, and notwithstanding the diminution in the production of each worker, wages had increased from thirty to forty per cent.

The Reform Bill of 1832, far from being final, proved to be but a beginning in the reform of the franchise and the redistribution of seats in Parliament. It established the principle that the House of Commons should really represent the people of the United Kingdom, and whenever public attention was not diverted by more pressing questions, it returned to the subject of the reform of Parliament. The reform bills of 1867 and 1884 were enacted with much less excitement and commotion than the act of 1832, but in each case there was a long agitation, in the course of which Bright delivered some of his most stirring speeches. He impressed upon the public mind the anomaly of a free government from all participation in which the majority of the people were excluded. When it became apparent that the people really wanted a reform of Parliament, Disraeli determined to be the minister to grant it. It is an interesting commentary upon the quality of Bright's radicalism that the Reform Act of 1867 as modified by the House and finally accepted by the government went further in the direction of democracy than Bright had ever proposed to go. The leader of the Radicals, who had so long been charged with attempting to undermine society, was more conservative than the Conservatives themselves.

The period from 1846 to 1867—from the repeal of the corn laws to the second Reform Act—is marked by the ascendancy of Palmerston. Upon most questions Bright supported the Russell and Palmerston administrations, but he condemned their foreign policy. This was particularly true as to the Crimean and Chinese Wars. He believed them to be wrong, because avoidable. His opposition, however, was unavailing, because, in the first place, he never made it quite clear whether he was opposed to these particular wars, or whether, as a Quaker, he was opposed to all wars; and because, as Kinglake says, "A man cannot carry weight as the opponent of any particular war, if he is one who is known to be against almost all wars."

To the liberal movements upon the Con-

tinent from 1848 to 1860, Bright was singularly indifferent. He deplored the enthusiasm aroused in England by Garibaldi. He did not share Gladstone's sympathy with the sufferings of the Neapolitan political prisoners, nor Palmerston's desire to promote the freedom of Italy, nor Lord Russell's interest in the independence of Poland. In striking contrast with his apathy as to these questions was his strong interest in the Civil War in America.

Bright did much to raise the tone of British politics. He represents the best type of agitator, for his course was always dictated by conviction and he never flattered the people. He repeatedly showed his independence by maintaining his opinion against an almost universal opposition. He denounced the Crimean and Chinese Wars when such a stand was regarded as almost treason to England, and when the whole country was ready to rally to the support of Palmerston. He demanded justice for the Hindus while the memory of the mutiny was still fresh in England. He was in opposition to the most influential elements in English society in his support of the War for the Union. In these and many other instances he displayed remarkable independence of judgment, and it must also be said that subsequent events have in general justified his course.

It is as an orator rather than as a statesman that Bright takes highest rank. Lord Salisbury has said of him, "He was the greatest master of English oratory that this generation has produced, or I may perhaps say several generations back. I have met men who have heard Pitt and Fox, and in whose judgment their eloquence at its best was inferior to the finest efforts of John Bright." Unlike the other great orators of the queen's reign, notably Gladstone, Bright did not have a classical education. His style was formed largely upon the English Bible, and his language was the language native to the soil. His speeches are characterized by a homely simplicity which appeals especially to the popular heart and which was the secret of much of his power.

Perhaps the feature of Bright's career of most interest to Americans is his attitude toward our Civil War. When this great struggle began, the American government received assurances of sympathy from almost all European governments. The pope and Cardinal Antonelli repeatedly expressed their hope that the Union would be preserved. Cavour from his death-bed gave assurance that Italy could not sympathize with any movement that tended to the perpetuation of slavery. The czar proved a steadfast friend throughout. But the attitude of France and England was radically different. The French emperor was firmly convinced that the Confederacy would succeed. Perhaps he was the more ready to think so since this accorded with his designs in Mexico. He was even anxious to assist in the disruption of the Union, provided he could do so without too much risk to himself. Hence he repeatedly urged England to join with him in recognition of the independence of the Confederacy. This the British government was not willing to do, but throughout the war it maintained an attitude bordering upon hostility to the government at Washington. In this attitude it was supported by the ruling classes in general. Influential circles were dominated by southern sentiment. The vast majority of the official world, of Parliament, and of the officers of the army and navy were partizans of the South. The most powerful and popular papers in London warmly advocated the Confederate cause. Resolutions were offered in Parliament for the recognition of Confederate independence. Lord Russell asserted that the North was striving for empire and the South for independence, and Gladstone declared that Jefferson Davis had made an army, had made a navy, and, more than that, had made a nation.

In this general chorus of hostility, there were two conspicuous exceptions—the Prince Consort and John Bright. Prince Albert died December 14, 1861, but his friendly counsels, especially in connection with the settlement of the Trent affair, did much to preserve harmony in the relations of the two countries. Throughout the war, our most influential friend in Great Britain

was John Bright. This is all the more noteworthy when it is remembered that he was a heavy sufferer as a result of the war, for the cotton famine which came to England after the blockade of the southern ports fell most heavily upon Lancashire, and Bright's own mills had to close. Yet his faith in the justice of the cause of the Union did not waver even when our most ardent friends hardly hoped for success. In 1861 he said:

Whether the Union will be restored or not, or the South will achieve an unhonored independence or not, I know not and I predict not. But this I think I know, that in a few years, a very few years, the twenty millions of freemen in the North will be thirty millions or fifty millions—a population equal to or exceeding that of this kingdom. When that time comes, I pray it may not be said among them, that in the darkest hour of their country's trial, England, the land of their fathers, looked on with icy coldness, and saw, unmoved, the perils and calamities of her children. As for me, I have but this to say: I am one in this audience, and but one in the citizenship of this country; but if all other tongues are silent, mine shall speak for that policy which gives hope to the bondsmen of the South, and tends to generous thoughts and generous words and generous deeds between the two great nations who speak the English language, and from their origin are alike entitled to the English name.

And at a later period of the war he said:

From the very outburst of this great convulsion I have had but one hope and one faith, and it is this—that the result of this stupendous strife may be to make freedom the heritage forever of a whole continent, and that the grandeur and prosperity of the American Union may never be impaired.

THE TRUE MOTIVE IN THE CHRISTIAN LIFE.

For the love of Christ constraineth us.
—2 Cor. v. 14.

BY the love of Christ in this passage we are to understand Christ's love for us. This love seemed to the apostle so great that it ought to rule his life. Since Christ has died for us, "they which live should no longer live unto themselves, but unto him who for their sakes died and rose again." This motive, St. Paul says, held him in bonds—shut him in from the lower and personal objects of life. He had spoken before of the *fear* of the Lord—or, as the older version has it, "the terrors of the Lord"—as a motive, for he says, "We must all appear before the judgment seat of Christ"; but, after all, it is love and not fear that directs his life.

The best illustration of the meaning of the text is the story of Paul's own life. We can trace the history of his Christian enthusiasm. We know the day and the hour when his love for Christ began. We know what sort of man he was before, and what he became afterward. The earnestness of his preaching, his disregard of personal interest, the zeal that was never dampened, the courage with which he faced danger and persecution—all show that the ruling power in his life was gratitude and love to the divine Redeemer. It was not chiefly interest in a great cause. Nor was it mainly the impulse of humanity. His addresses and his epistles show that the ruling power in his life was love for the Christ. He speaks of himself as "the servant of Jesus Christ," "called to be an apostle," "separated unto the gospel of God." He gave his whole heart to Christ in return for the fulness of divine love which he found in him, and this changed not only the plan of his life, but also his personal character, and made him a patient, humble, and self-denying apostle and missionary.

The text will lead me to speak of the love of Christ as the true motive in the Christian life.

I begin by saying that there is no true obedience to God except that which is free and hearty. God is love, and love is the fulfilling of his law. The great commandment is: "Thou shalt love the Lord thy God with all thy heart, and thy neighbor as thyself." A religion of fear does not meet this requirement, nor a religion of duty, nor

a religion that springs from self-interest. One child in a family may be obedient because he is afraid of punishment, another because he expects a reward, and a third because he feels that it would be wrong to disobey. But the really dutiful child obeys his father and his mother because he loves them. His motive is not fear, or self-interest, or duty, but affection. He fears nothing so much as to grieve them. He desires nothing so much as to please them. His duty is his delight, because his heart is in it. Love is the true basis of religion—love to God, our Father, the purest and best of beings. This must have been the original religion of mankind, which bound them to the Creator as dutiful and loving children.

This was the religion of the Old Testament. God chose Israel as his own people, and sought to lead them to do his will, as the expression of their gratitude and affection. So far as they were really his people, they entered into this religion of love. Abraham believed God, and his faith was a loving trust in him. David said, "As the hart panteth after the water brooks, so panteth my soul after thee, O God." The Psalms reveal the same struggles with sin, and the same sense of dependence upon God's mercy, and the same trust in his love, that a devout Christian feels, so that they are the best means we have to express all the phases of a Christian experience. The religion of the prophets was also a religion of love. God revealed himself to draw them by the excellence of his character.

On the other hand, the religions of the heathen have been, for the most part, religions of fear and selfishness, or, at the best, religions of duty. There has been no love in them. Men have always felt dependent. Many of the evils they suffer are obscure and mysterious, and imagination creates for our minds unseen agents and powers of evil, and fear has led to the cruel rites of paganism. Conscience has added to the fears of men. St. Paul saw men all about him who were governed by such motives as these in their religious services. When he stood on Mars Hill he did not address a people without religious ideas, for he was surrounded by the most beautiful temples the world has ever seen; but a people whose religious ideas needed to be corrected by the teachings of Christ. The world was full of religions—such as they were—before Christ came. What he added to religion was not so much new truths as a fuller revelation of the love of God. He was able to bring God so near to men that his love now rules their lives.

Let us see, in the next place, how Christ revealed God to men. We may take St. Paul as a representative of the more enlightened men of his time. He knew God before he had any knowledge of the personal Christ, for he was familiar with the Old Testament, and especially with God's dealings with Israel; and with the sacrifices, and all the services of the temple. He knew God not only as he is revealed in nature and in conscience, but he knew him as the leader of his people, their lawgiver, and their moral governor. He did not need another prophet to reveal God. All that prophets could do to this end had been done by those wonderful men whose inspired writings were read in the synagogues every Sabbath day. Nor did St. Paul need new miracles to authenticate God's revelation. The one thing that he did need was to bring these truths so near to his heart that they would mold his character and control his life. In order to do this, Paul needed, in some way, to come nearer to God as a personal friend and helper.

This is what the incarnation does. He who "was in the beginning with God, and who was God," "was made flesh, and dwelt among us, and we beheld his glory, the glory as of the only begotten of the Father, full of grace and truth." We count our years from the day of his birth, because that day marks the beginning of a new era. The angels sang "peace on earth, good will to men," because a Savior was born. The leading fact in redemption, on which all the rest depends, is the fact that the Son of God became the Son of Man so as to reveal God to men more perfectly. He

did this, we are told again and again, so as to commend the love of God unto us. In very deed, "though he was rich, for our sakes he became poor, that we through his poverty might become rich." This is what he always claimed, that his Father had sent him, because he loved sinful men, and desired to save them. He said, "He that hath seen me hath seen the Father," and he taught that "men should honor the Son even as they honor the Father." This, then, is the great fact in respect to the life of our Lord: that the Son of God became flesh, and dwelt with men, that he might in that way reveal God to them.

As we read the Gospels, we are impressed, first of all, with the *reality* of his life. He was as truly human as he was divine. He did not come among men as a full-grown man, but as an infant. He did not separate himself from the experiences of a common human life, but he was born into a family; he was subject unto his parents, as other children are; he increased in wisdom and in stature; he went, "as his custom was, to the synagogue" on the Sabbath day.

If the Son of God were to live among men, to reveal God to them, he would need to enter very fully into the experiences of men. He could have been born in a palace, and lived the life of a prince. Or he could have been born into a home of wealth, and lived in luxury, apart from the masses of men. Or he could have been such a man as John the Baptist, who dwelt in the deserts, and shunned the companionship of men, and the pure joys of life. But the life of Jesus touched the common lives of men at the greatest number of points. He did not shield himself from the experiences of common men by wealth, or rank, or station. He was a man of the people; born in poverty, as the largest number of men have been. He shared the conditions of a humble home, in a small country town; and in his later life, he had not even such a place as that to shelter him. It is true that when he was transfigured, "his face did shine as the sun, and his garments became white as the light." But this was only once in his lifetime. For the rest, he lived with the common people and wore the dress of a common man, and shared the food of fishermen, and ate with publicans and sinners. He was not a man of exclusive tastes, or of narrow sympathies. He went, not only to the dwellings of the poor, but to the homes of the rich; not only to places of sorrow, but into scenes of festivity. He was a true Son of man, linked with the highest and with the lowest, in full sympathy with little children, and with young men, and with all such as suffer, and with the tempted and the fallen; and his gracious words as truly as his gracious acts revealed in a human life the wonderful love of God. It was by this life among men that Jesus was fitted to bear our sins. We do not understand the atonement until we understand the deep meaning of the life of our Lord. He was fitted to bear our sins, because he had first borne our griefs and our sorrows. He made himself an offering for sin by his own voluntary act, showing how much God loved us by taking our condemnation, and honoring the justice of God by his sacrificial death.

There is no other thing that awakens so deep an interest in us as the experiences of a brother man. We see the evidences of God's goodness and wisdom in nature; we read the revelations he has made in the older Scriptures; but they do not touch us very deeply. But when we come to know the love of God in sending his Son to die for us, as a man may die for his friend, then "the love of Christ constraineth us."

Some time ago I studied a painting, by an American artist, which is called "The Heart of the Andes." I was impressed at once by the grandeur of the mountains. My eye followed the valleys that opened on this side and on that—valleys shadowed by mountains that seemed to bear up the very heavens. It was a view of nature in her loftier moods. But, after all, the picture is cold, and fails to kindle one's imagination until he looks at the hunter's cabin in the foreground, from which the smoke of the morning fire is rising, and at the hunters themselves, who stand leaning on their

rifles, looking down the valley. That glimpse of human life, in those awful solitudes, touches deeper sympathies than nature can move; aye, that life adds sublimity to the mountains themselves, because their shadows fall on living men.

God has painted for us on the great historic canvas of this world a picture which is to reveal his goodness. It is very beautiful, full of the tokens of his wisdom and goodness. He hung up the picture that men might study it, and might see his glory. But they did not regard it. They worshiped idols, the work of their own hands. After a few centuries the divine Artist retouched the picture, bringing out new and more wonderful illustrations of his holiness and his love. But still the world passed it by. In the fulness of time, God painted, in the foreground of the picture, a human form—the form of the well-beloved Son; a "man of sorrows and acquainted with grief"; "his visage so marred, more than any man, and his form more than the sons of men," and this divine Man is pointing to his own cross, and telling those who labor and are heavy laden to come unto him and find rest for their souls. And now the old picture stirs the world, according to Christ's own words, "And I, if I be lifted up from the earth, will draw all men unto me." That one sensitive, personal Being, divine and yet human, our Lord and yet our brother, who loves us with all a brother's affection, brings God near to us. One real look at the cross must melt any human heart. And so the love of Christ is subduing the world unto him. God is so near that he draws us, and we follow him. His love kindles our love, and we become his children because we are the children of his love, for "whosoever loveth is born of God, and knoweth God, for God is love."

We come, then, in the last place, to consider how the love of Christ has directed the lives of his disciples.

Here, too, we may well go back to the times of the apostles, and see how they presented Christ, and how the early Christians received him. It is very plain that the great effort of the apostles was to present the personal Christ to men. It was not a system of philosophy or of doctrines which they preached, nor a new organization, but a Savior whom they had seen, and whose teachings they were able to repeat. "We are his witnesses," they said. He has called us, and sent us to you. His is the only name by which you can be saved. "I determined to know nothing among you save Jesus Christ." In fact, the name which was naturally given to the disciples was Christians, as the personal followers of the Christ.

You will call to mind also that this is the way in which our Savior himself talked to men. The most common direction he gave was this: "Follow me." "I am the Way," he said, "and the Truth, and the Life." "If any man thirst, let him come unto me." "Come unto me all ye that labor, and are heavy laden, and I will give you rest." Moses did not teach men so. Samuel did not. None of the prophets would have dared to teach men to come unto them for rest and salvation. They called upon men to obey the commands of God, and to do his will. But Christ called men to himself. He called for their supreme devotion. They must leave all else for his sake. They must not count their lives dear unto themselves. "If any man will be my disciple let him deny himself, and take up the cross and follow me."

This personal devotion to Christ has characterized the lives of Christians in all the periods of spiritual prosperity. The early disciples confessed him before their persecutors. They went to their martyrdom because they would not deny him. "Eighty and six years have I served him," said Polycarp, "and he has always been my helper, and shall I now deny him to save my life?" The early hymns of the church are full of this tender personal devotion. The early confessions and creeds place Christ in the center, as the one object of faith and love. The early missionaries went forth only in his name, to make known the Savior to the pagans.

It was only as religion declined that the attention of men was absorbed in the

church as a great organization, and in systems of doctrine, and in methods of worship. Whenever the life of piety has been rekindled in the church, the love of Christ has revived, and he has become again the one object of love and of faith.

This love always leads to personal devotion. The disciple gives his whole heart to the Redeemer. His love becomes an enthusiasm. It never counts the cost. It begins by giving all. So that the love of Christ has shown itself to be, by far, the most powerful motive of human action. It has been stronger than the love of wealth, for many have made themselves poor for Christ's sake. It has been stronger than the love of friends or of country, for many have left father, and mother, and native land, to preach Christ to the heathen. In fact, there is no heroism in this world except that which is inspired by love, and there is no sort of heroism so grand as that which is inspired by the love of Christ.

This love also unites us with Christ. Faith reveals God and spiritual things to the believer, so that he knows God and Christ according to these profound words of our Lord: "This is life eternal, that they might know thee, the only true God, and Jesus Christ whom thou hast sent." It is only in this way of love and trust that we can know him whom we have not seen, and know the things that are spiritual. It is not by the understanding, with its slow processes, but by a direct beholding, when the heart is opened to God, and he reveals himself to us, that we gain a sense of the reality of the spiritual, which uplifts us from the earth, and fills us with longing for the glory that shall be revealed.

This personal love for Christ also leads to the confidence of faith. Perfect love casteth out fear. "We live as seeing him who is invisible," and "we know that nothing shall be able to separate us from his love, neither things present, nor things to come."

Thus we see that true religion has its beginning in God's love for us, and that love is its very life and soul. "The love of Christ constraineth us," because he revealed the very heart of God, and that love draws us toward God by an attraction constant as that which holds the suns and constellations in their revolutions about the central throne.

This is a truth concerning the essential thing in our religion which men are always forgetting. They are apt to think of some experiences, or some outward duties, when they should think of union with Christ. There have been times when it was more common to appeal to the fears and the selfish desires of men, than to their consciences and their hearts. The progress of religion in our day is indicated by the emphasis which the pulpit now places upon the motives that come from the love of Christ. Our modern theology gives Christ the central position, and exalts the cross to the highest place among the motives to lead men from lives of sin.

I think, too, that the emphasis which is now placed upon the love of Christ is making the religious life more cheerful and more fruitful. It is adding to the gentleness, and generosity, and consecration of Christians. It is making our methods of worship more simple, and is leading to a new interest in the service of song. It is drawing the children to the Savior, and is filling the land with Societies of Christian Endeavor. It is bringing the branches of the divided church into a closer union. This love, which was kindled by the love of Christ, is sending missionaries to every tribe and nation. This love for Christ is yet to overcome the evil of the world, and to lead greater masses of men to holiness and to God.

Let us enter with all our hearts into this life of love. Let us seek to come so near to the heart of our Redeemer that we, "being rooted and grounded in love, may be able to comprehend with all saints what is the breadth, and length, and depth, and height; and to know the love of Christ, which passeth knowledge, that we may be filled with all the fulness of God."—*Ezra Hoyt Byington, D.D., in "The Christ of Yesterday, To-day, and Forever."*

RECENT PROGRESS IN PHYSICAL SCIENCE.

BY L. H. BATCHELDER, A. M.

PROFESSOR OF PHYSICAL SCIENCE IN HAMLINE UNIVERSITY.

ABOUT a hundred years ago a learned man giving an account of some experiments in electricity remarked that "investigation has now gone so far that probably no further facts of importance concerning the science will ever be discovered." It is a far cry from his experiments with the static plate machine and Leyden jar to the installation at Niagara Falls of a series of 5,000 horse-power dynamos. But the century's progress in this one branch of physical science is only a fair index of that in nearly every other. The papers on chemistry published in THE CHAUTAUQUAN during the last few months have, in some measure, pictured the wonderful growth of chemistry during the century. Indeed, we have seen that the modern science of chemistry had its birth at about the opening of the century. It would be interesting to trace the causes which long delayed the development of physical science and finally crowded such mighty advances into a single century. Will the twentieth century see such revelations and revolutions in science as has the nineteenth? Are we still simply Newton's children, playing on the shore of the great ocean of yet-to-be-explained scientific truth? But we must turn resolutely aside from such speculations as these. Indeed, we have been hearing quite too much of speculation and promised discoveries from certain ambitious persons who systematically employ the reporter and the sensational daily press to inflate their own greatness by accounts of inventions which they are about to perfect and discoveries which they are about to make—a practice only less reprehensible than another of which we are not without striking examples, that of announcing one's self with trumpet-shout and crash of cymbals to be the original and only author of some invention already given to the world by a real scientist.

Our task in this paper then is, not to attempt a "review of the century's progress" or to speculate about the coming century of science, but simply to sketch such material advances as have been made during perhaps the past year or two; though in doing so we shall naturally find a number of these advances to be only steps in a series of investigations extending in some cases over a considerable period of years. The reader's attention has already been called in these papers to the fact that no discovery in science springs full-fledged from a single brain, but that it is rather the fruit of long and arduous investigation participated in often by many workers.

In chemistry one naturally first recalls the newly-discovered elements in the atmosphere, not because they are more important, perhaps, than those discovered from time to time in material from the earth's crust, but because they appeal more directly to the popular imagination. It may be said of these elements, as was said by Sir William Crookes, in his inaugural address as president of the British Association at the late Bristol meeting, of a new element which he announced that he had discovered in certain so-called rare earths:

> I ought almost to apologize for adding to the already too long list of elements of the rare-earth class, the asteroids of the terrestrial family. But as the host of celestial asteroids, unimportant individually, become of high importance when once the idea is grasped that they may be incompletely coagulated remains of the original nebula, so do these elusive and insignificant rare elements rise to supreme importance when we regard them in the light of component parts of a dominant element, frozen in embryo and arrested in the act of coalescing from the original protyle into one of the ordinary law-abiding family for whom Newlands and Mendeleeff have prepared pigeon-holes.

Lord Rayleigh, the English scientist, was for seven years engaged in the exact de-

termination of the densities of the commonest gases. He observed that atmospheric nitrogen, that derived from the air, uniformly showed a density about one half of one per cent higher than nitrogen of chemical origin derived from breaking down nitrates. He finally concluded that this disparity was only to be accounted for on the hypothesis that atmospheric nitrogen contained something other than pure nitrogen, and so announced. A series of experiments which he and his friend Professor Ramsay instituted finally led to the announcement, some four years ago, that the atmosphere contains a third elementary gas in small quantity, about four fifths of one per cent, or about one per cent of what had been regarded as nitrogen. This element they called "argon," though there was from the first something more than a suspicion that it was itself a mixture of other gases.

Shortly after Professor Ramsay, while examining the spectrum of a gas obtained from a mineral called clevite for evidence of the presence of argon, discovered the bright helium line and thus "ran to earth" the element discovered twenty-six years before in the sun's spectrum by Professor Lockyer. It will perhaps be remembered that Professor Ramsay, in his address before the British Association at Toronto in 1897, suggested the probability of another gas in the atmosphere with properties which would place it midway between helium and argon. This gas he intimated that he had searched for in vain. During the year Professor Ramsay and Mr. Maurice Travers have announced the discovery not only of this gas, which they call "neon," new, but of three other companions of argon in the atmosphere, "krypton," "xenon," and "metargon." Whether these shall, on further investigation, all prove to be distinct elementary substances, of which there seems at present some question, it is certain that, as Professor Crookes says, "his fellow-workers freely pay tribute to the painstaking zeal with which Professor Ramsay has conducted a difficult research, and to the philosophic subtlety brought to bear on his investigations."

Argon was separated from the other constituents of the atmosphere by first removing the water vapor and then the carbon dioxide always present in about .04 of one per cent; then its oxygen was made to combine with hot copper and its nitrogen with magnesium turnings, thus leaving the inert argon. But an entirely different method had to be pursued in separating the argon from its equally inert companions. This necessitates turning aside here to trace an entirely distinct line of investigation on gases, also running through a series of years, but converging, as we shall see, at this point with that of Professor Ramsay.

Before 1850 all the known gases had been liquefied except hydrogen, oxygen, nitrogen, nitrogen dioxide, carbon monoxide, and marsh-gas. These were therefore called "permanent gases." Later Andrews showed that above a certain "critical temperature," a gas cannot be liquefied no matter what the pressure; so that the liquefaction of gases was seen to be simply a question of securing a low enough temperature. Such was the state of the question in 1877, when, by entirely distinct processes, Cailletet in France and Pictet in Switzerland liquefied oxygen. The experiments of these scientists showed that "the permanent gases are all capable of being liquefied." The matter was prosecuted by various investigators, notably by Olzewski, and was finally taken up by Prof. James Dewar, who in 1895 presented to the Chemical Society of London a laboratory apparatus capable of preparing notable quantities of liquid air. With the liquid air thus obtained, Professor Dewar performed a number of highly interesting experiments. On the 10th of May last he announced the liquefaction of hydrogen, which he had been able to obtain in considerable quantities at a temperature of $-205°$ C, under a pressure of 180 atmospheres. In a subsequent communication he reports its temperature of ebullition under a pressure of one atmosphere to be $-238°$ C, and that evaporated in a vacuum, its temperature is about $-250°$ C, or $-418°$ F. This is within $23°$ C of absolute zero.

Thus is opened up a new field for scientific

research—the properties of matter at temperatures in the vicinity of absolute zero. The density of liquid hydrogen is about one fourteenth that of water, though it has distinct liquid properties with a well-defined meniscus. A glass balloon terminating in a slender tube filled with helium gas and sealed was plunged into the liquid hydrogen when the helium was seen to be liquefied in the slender stem. This was the first time that hydrogen and helium had been obtained in the liquid state, though it should be said that Olzewski had previously made some observations on hydrogen in a condition seemingly of mist. Dr. Hampson of England, Herr Linde of Munich, and Mr. Tripler of New York have each invented an apparatus, apparently on much the same principle, for liquefying air in large quantities. In each of these, no foreign refrigerant is used, but simply the cooling produced by the expansion of a part of the previously condensed air. Industrial machines are constructed capable of furnishing one hundred and thirty-five pounds of liquid air per hour.*

Professor Ramsay and his assistant having prepared a considerable quantity of argon by absorbing the oxygen with red-hot copper and the nitrogen with magnesium, attempted to separate it from its suspected companions by diffusion. In this, however, they failed, or at least only partially succeeded. The method of separating oxygen and nitrogen by getting them to combine with some other element was of course not available with argon, since it is absolutely inert toward every known substance—a property which differentiates the new gases in a marked way from all other known elements.

At this point in their investigation, Professor Ramsay and Mr. Traverse had recourse to Professor Dewar's liquid air, which Dr. Hampson, by means of his newly devised apparatus, was able to furnish them in practically unlimited quantities; surrounding their previously prepared argon with liquid air, which boils at a temperature of −191° C under a pressure of one atmosphere, they readily obtained it in a solid state. Now the separation of the several gases was precisely similar to the separation by distillation of alcohol from water, or the fractional distillations of petroleum, the only difference being the low temperature at which the distillations take place. By previously fractioning liquid air itself, krypton had been discovered and the feasibility of the method ascertained. The first gas to be obtained in this way after the argon itself had boiled off was the gas named by the discoverers neon, with an approximate density of 9.6. Helium has a density of 2 and argon of 19.94. All these gases have apparently one atom to the molecule, differing in this respect from the common elementary gases, like nitrogen, which are diatomic; accordingly the atomic weight of helium, neglecting fractions, is 4, of neon 19, and argon 40. Thus these three form a series, though their place, or the place of their companions, in Mendeleeff's "pigeon-holes" is still an unsolved problem. Xenon, the latest discovered of these gases, appears to exist in minute quantities. "Indeed," says Professor Ramsay, "all these gases are present only in small amount. It is not possible to state with any degree of accuracy in what proportion they are present in atmospheric argon. Of neon perhaps we may say that the proportion in the air must be about one part in 40,000. We estimate the proportion of the heavier gases at still less." It should be explained that the principal means relied upon for identifying these gases, including argon, is the examination of their spectra. Thus the spectroscope is playing an increasingly important rôle in physical as well as chemical investigations.

Professor Nasini has announced the discovery in some volcanic gases at Pozzuoli of that hypothetical element coronium supposed to cause a certain bright line in the spectrum of the sun's corona. By analogy, it must be much lighter than hydrogen; a study of its properties yet remains to be made. There now remain two unknown celestial elements, aurorum and nebulum, for

*See Professor Barker's article on "Liquefied Air" in THE CHAUTAUQUAN for August, 1898.

the fortunate spectroscopist who shall discover them in terrestrial matter.

The X rays, whose discovery was announced by Dr. Röntgen, now Baron Röntgen, about three years ago, have continued to receive attention from investigators. The much-disputed question of their action on bacteria seems to be settled by the announcement of Dr. Rieder of Munich that bacteria are killed by the discharge from hard tubes, that is, by rays generated in a tube of extremely high vacuum and therefore having, as has been ascertained, a very high penetrating power. Using such a hard tube, Dr. Röntgen himself has taken a photograph of a double-barreled rifle showing the balls and even the wads and charges within the steel barrels. As to the nature of the rays, which was for a time so much a puzzle, physicists seem to be agreeing on a wave or ether theory, and this theory is corroborated by the fact that the mathematical physicists have shown that light of exceedingly short wave-length would be but slightly absorbed by ordinary material media and would not be refracted at all. Thus the chief peculiarity of the X rays is accounted for. So it would seem that we should drop the term "X" rays, and use instead Röntgen rays. It has been found that some bodies without special stimulus will give out rays closely allied, perhaps identical with the Röntgen rays. Dr. Russell has shown that a great number of substances are capable of affecting the photographic plate if it is exposed in darkness for a sufficient time.

The fundamental discovery by Professor Hertz of the identity of light and electromagnetic waves is being gradually developed in a practical direction. By the use of a singularly sensitive detector of the Hertzian waves, Signor Marconi has devised a successful and practical system of signaling, popularly known as wireless telegraphy, which must inevitably come into use in lighthouse and marine work. The system presents more analogy to optical signals by flashlight than to what is usually understood by the electric telegraph, since the impulse travels from sender to receiver in essentially the same way as in the case of a flash-light. Mr. Nicola Tesla says that the rarer atmosphere of high altitudes is a far better conductor than that of lower levels, and he proposes to utilize these upper layers for the transmission of electric energy.

No controlling invention in electricity has been made during the last five years. The advances in this branch of applied science have been chiefly in developing and expanding previous inventions. The recent successful operation of the telephone over a 1,900 mile circuit—from Boston to Little Rock, Ark.—indicates the perfection to which this servant of man has been brought. The rapid development of the great plant at Niagara Falls should be recorded. Over 60,000 of the 250,000 horse power, owned by the company, is already utilized and the demand for the subtle fluid is said to outrun the supply, so the end is not yet. This is only an index of what is being done wherever water-power is available, though necessarily on a smaller scale elsewhere.

In electro-chemistry considerable progress has been made in the refining of copper by electro-deposition. The development of this method has lately been very rapid owing to the increased demand for chemically pure copper, so that last year more than one half of the copper output of the United States and more than one third of that of the world was refined by this method. The world's output of copper for 1897 was over 600,000,000 pounds. This means the transport of more than 200,000,000 pounds of copper, atom by atom, across the space separating the electrodes in the electrolytic bath. When we remember that a cubic inch of copper contains something like sixty thousand billions of atoms, such an enormous expansion of what was at first only a laboratory experiment may well excite wonder. The electro-refining method owes its success largely to the presence of silver and gold as impurities in nearly all copper ores, especially those mined in this country. These fall to the bottom of the electrolytic bath as a sludge and are easily recovered. The value of this gold and silver amounted last year to about eight and one half millions of

dollars. The pure copper obtained in this way was coarsely crystalline and must be remelted for use; but lately improvements in the process have been made so that sheet copper of any desired thickness and of satisfactory tensile strength is obtained directly from the bath. Tubes of any diameter and thickness are turned out in the same way.

In the paper of last month the methods of manufacture employed in the important soda industry were briefly described. Methods for making sodium carbonate and hydrate, and bleaching-powder, based on the electrolytic decomposition of common salt, have been passing through the experimental stage and bid fair ultimately to replace both those now in use. In one of the most successful of these electrolytic methods the apparatus is an electrolytic cell, or tank, in which the positive pole, or anode, is of the usual carbon; the negative pole, or cathode, is a sheet of copper-wire cloth, in intimate connection with which is asbestos fiber incorporated into a solid sheet, one fourth of an inch in thickness, by means of a silicate composition. This is the essence of the whole invention. This cathode diaphragm forms a partition in the cell. It is not a filtering medium in any sense, but acts by the principle of osmose, permitting the sodium to pass through, but being quite impervious to the salt solution itself. When the part of the cell containing the anode is filled with brine and an appropriate electric current sent through it, the salt is decomposed into its elements; its chlorine escapes at the anode and is conducted into lime, with which it unites to form bleaching-powder; the sodium passes through the cathode diaphragm by osmose and there either meets a jet of steam and trickles to the bottom as a strong solution of sodium hydrate, or it is met by a jet of carbon dioxide, with which it unites to form sodium carbonate. The cell is constantly replenished by a stream of brine from the salt-well, while the carbon dioxide, if the carbonate is to be made, is derived from the products of combustion in the furnace of the engine used to drive the dynamos.

I have thus endeavored to report the main "currents" in "physical science" pure and applied. I cannot more appropriately close this paper, and with it this series of papers, than by quoting these words of Professor Ramsay's: "The object of science, as indeed of inquiry in all departments of human interest, is to reconcile the world of man with the world of nature, and to know in part that of which we hope one day to attain to a perfect knowledge."

THE LIQUOR INTERESTS IN ENGLISH POLITICS.

BY EDWARD PORRITT.

SINCE the early seventies the liquor trade has been increasingly active and increasingly powerful in English politics, and especially so during the last ten or fifteen years. To realize the position that the trade has now made for itself, and the influence it exercises in political life, it is necessary to understand at least the main outlines of the licensing system; to know how it has been worked for the last thirty years; and to grasp the great economic change which within that period has come over the liquor trade in England; for the policy on which the licensing system has been administered, coupled with the great change in the economy of the trade, accounts in a large measure for the entrenched position of the liquor interest in national politics at the present time.

The granting of public house licenses in England is now, as since the days of Edward VI., in the hands of the local magistrates, the borough benches in the municipalities, and the county magistrates in the rural districts and in those urban communities not large enough to be incorporated as boroughs. The magistrates are not elected. They are appointed by the lord chancellor,

and hold office for life. In the boroughs it is possible for most of the locally prominent men to obtain seats on the bench. Neither in the boroughs nor in the counties are there salaries attaching to the office. The magistrates give their services. In the boroughs, three or four of them attend at the police courts each day to try minor offenses and to give preliminary hearings in the more important cases which are sent for final disposition to quarter sessions or the assizes. In the counties the magisterial benches are more exclusive. They have been left untouched by the democratic changes which have taken place since the eighties. The old laws and the old traditions still prevail. Consequently none but landowners can be of the county magisterial benches; and not even a landowner, if he has been engaged in retail trade. Social usages and social distinctions make the dividing line between borough and county magistrates. Their duties under the licensing system, are, however, practically the same; and except as to hours of closing, the licensing system is uniform in urban and rural England.

Once a year the magistrates, both in town and country, meet in special session to renew existing licenses and to deal with applications for new ones. From 1830 to 1869 England tried the experiment of free trade in beer. During this period publicans who desired to sell wines and spirits, that is to keep what are known in England to-day as fully licensed houses, had still to apply for licenses to the magistrates. But from 1830 to 1869, any one could obtain a license to retail beer, which might be drunk on his premises. The result was an enormous increase in the number of public houses, and a marked increase in drunkenness. The increase in drunkenness at last became so obvious that Parliament was compelled to revert to the system which had existed prior to 1830, and once more place the duty of issuing all public house licenses in the hands of the local magistrates. At the time the change was made in 1869 the beerhouses, which had come into existence between then and 1830, were left untouched. Their licenses were made permanent; and to-day these houses, which can sell beer only, exist side by side with the fully licensed houses, at which wines and spirits as well as beer are retailed.

When the magistrates were once more in possession of full power over the granting of licenses, they adopted the policy of restricting the number of licensed houses. Beerhouses had come into existence in such large numbers during the forty years of free trade that in the later sixties most communities, rural and urban, had more public houses than were necessary; more than could be well policed; and many of the beerhouses were admittedly plague spots in the community. Since about 1870, all over England, the general policy of the magistrates has been to keep down the number of licensed houses; and in scores of English towns a license for a new public house has not been issued for twenty or thirty years past. The magistrates have comparatively small power over existing licenses. These are held from year to year; but so long as a license-holder conducts his house with satisfaction to the police the renewal of his license at the annual meeting of the magistrates is little more than a matter of form.

Over the issue of new licenses, however, the magistrates are supreme. If a man applies for a license and is refused, he has no appeal. All that he can do is to renew his application at the licensing sessions next year, and hope that then the licensing bench may be of another mind. In many towns applicants for licenses have appeared before the bench year after year for ten or fifteen years without in the end obtaining the license they sought. While this policy of restriction has undoubtedly had a good effect so far as the policing of public houses is concerned, and while to some extent it may have reduced drunkenness by limiting the opportunities for obtaining drink, it has unquestionably greatly complicated the licensing question as a political problem demanding the attention of Parliament. During these thirty years, the population of urban England has grown enor-

mously, and with this growth there has been a tremendous increase in the value of existing licenses. This increase in value is inevitable; for each license-holder is in possession of a monopoly, and by the policy of the magistrates he is kept free from new competition.

Under any circumstances, the monopoly of the license-holder becomes more valuable as population in his neighborhood increases. But side by side with the growth of population, there has gone on a vital change in the economy of the brewing and distilling trades. When in 1869 the licensing system was reconstructed on its old basis of complete magisterial control, except in London and in a few of the larger provincial cities, breweries and distilleries were still comparatively small affairs. They had not got well into the factory stage. Most of them were in private hands; and the whole business was comprised within the walls of the brewery or distillery. Thirty or forty years ago many of the English public houses brewed their own beers. Others drew their supplies from the breweries in their neighborhood; but their relations to the brewery were no closer than those of the baker with the miller. They bought their beers where they could obtain them on the best terms, and were free to trade where they pleased. During the last twenty or twenty-five years, public houses of this kind have generally disappeared. The houses are still there, and they are still licensed; but they are now owned by great brewing concerns. They are, to use the English term, "tied houses," and they are compelled to buy all their beers and other liquors from the brewing concerns with which they are connected. Their independence is gone; and although the license of each house is still in the name of its occupant, the license is really the property of the brewing company, and the nominal holder is nothing more than a retail selling agent of the company, who can be dispossessed at a few days' notice.

Competition between rival brewing concerns for the possession of licensed houses has been so intensely keen that nowadays the mere permission to sell, which the license carries with it, is worth anywhere from five to twenty times the value of the house to which the license is attached. This change in the economy of the trade, and in the relations between the license-holders and the breweries, has led to enormous extensions of brewery plants, and to brewery companies becoming large owners of real estate. Formerly most breweries were in private hands, that is they were owned by individuals or by families. To-day nearly all of them are organized under the limited liability company laws, and their vast capitals, their debenture bonds, and their ordinary shares are as well distributed among investors as railway shares. Many of the brewing companies are practically in the banking as well as the brewing business. Where they cannot buy a licensed house outright, they will often take a mortgage on it, so as to tie the house to the brewery. They also advance money to men without capital to go into their houses as selling agents.

The net result of all these changes, the increased value of public house property, and the revolution in the brewing industry, is that where thirty years ago one man was directly interested in the liquor trade a hundred or more are interested to-day. Thirty years ago a change in the licensing system, which might be proposed in Parliament, adverse to the trade, had to encounter the opposition of the individual brewery owners and of every license-holder and the people whom the license-holder might be able to influence. A similar proposition to-day would have to encounter the hostility of all these interests, plus the opposition of hundreds of thousands of people scattered all over the country, who are the holders of brewery debentures and brewery stock, and such people whom these holders might be able to influence. It is these ramifications of the liquor interest which account for the fact that the existing licensing system has not been materially amended for nearly thirty years. The system has many disadvantages. Chief of these is the continually increasing monopoly it gives to

existing license-holders. The laws with respect to Sunday opening are also makeshift and unsatisfactory, and in several particulars liable to much abuse. There is also a feeling that there are still too many public houses; and among liquor law reformers the fact that the licensing bench is responsible to no constituents is another grievance. All these grievances, however, are of long standing. Governments admit that they exist; that the licensing system as it now stands is in need of reform; but with the great and widely extended influence behind the liquor trade, they are exceedingly loath to commit themselves to any measure of reform, and to stand or fall by such a measure in Parliament.

The Liberal party has always been much more disposed to deal with the liquor problem than the Tories. The last reform which was made, that in 1874, under which grocers are permitted to sell liquor to be consumed off the premises, was carried by a Liberal government. Nowadays few temperance advocates will concede that this was a reform. They insist that it has brought many evils in its train. But it was carried through Parliament as a reform, and it encountered there the opposition of the holders of public house licenses, who looked upon it as an inroad on the monopoly they enjoyed. The advocates of Sunday closing, and of early closing, of the local veto principle, and of prohibition, have always been chiefly of the Liberal party, in and out of Parliament. There are a few advocates of drastic reform on the Tory side of the House of Commons; but support for private members' bills affecting the liquor trade has invariably come mostly from the Liberal benches; and in 1895 Sir William Harcourt, as chancellor of the exchequer, in a Liberal administration, introduced as a government measure a bill which was intended to establish local option, and to give to localities the right to say whether they would or would not have a public house in their midst. The Harcourt bill failed to pass; and in the general election in the same year the liquor interest used its varied and manifold influences to defeat the Rosebery government. Other causes were then working against the Liberals in the constituencies; but it is beyond all question that the active, well-organized, and skilfully directed opposition of the liquor trade had much to do with returning a Tory majority of one hundred and fifty to the House of Commons. The opposition of the trade brought about Sir William Harcourt's defeat at Derby, and compelled him to seek refuge in one of the county constituencies of South Wales.

By tradition and practice, the Tory party is the upholder of vested interests, such as those which have long existed in the liquor trade. Under any circumstances, the liquor interest would naturally be attracted to it. The presence and activity of licensing law reformers in the Liberal party also quicken this tendency of the liquor trade toward the Tories. But further than this, the Tories in recent years have attracted the liquor interest as much by their policy as by their traditions. In 1888, a Tory government made the admission that there were too many licensed houses and that the magisterial system of granting licenses was not satisfactory. It proposed to reform the licensing system by putting its administration in the hands of the county councils, which at that time were being created by what is now known as the County Government Act. It further proposed to give these elected county councils powers, not now possessed by the licensing magistrates, to close public houses where they did not meet the needs of the community.

With these proposals, however, there went an additional proposal that when a public house was closed adequate compensation should be paid to the license-holder. The compensation proposals were fairly satisfactory to the liquor trade, and in view of the years of agitation for reform, and of a feeling that reform was inevitable, the trade was disposed to accept the bill. The Liberals, however, offered the most strenuous opposition. The bill was opposed inside and outside Parliament, and rather than take any risks the Salisbury government withdrew it. By 1888, the liquor interest was well on the side of the Tories. After

the Liberal opposition to the compensation proposals, and even more after the Local Veto Bill of 1895, the trade became more closely allied with the Tory party. It realized that its fortunes were bound up with those of the Tories, and at the general election of 1895 it was more active and more alert in its hostility to the Liberals than at any general election since the trade began to interest itself in politics.

The results of this activity in 1895, so far as they affected adversely the fortunes of the Liberal party, have already been described. Another result, and one directly accruing from the success of the Tories, is the royal commission, which for four years past has been investigating the licensing system. This is a result hardly expected by the liquor trade. The trade had hoped that in return for its great services at the election in 1895, the government would immediately set it at rest by a measure of licensing reform, in which compensation would be guaranteed to all holders of liquor licenses who might be disturbed. But instead of doing this, the government appointed a royal commission. There will be no legislation until after the commission has reported. The likelihood is that there will be no legislation during the lifetime of the House of Commons elected in 1895; so that if the liquor trade desires to make sure of compensation it will have to repeat its efforts of 1895 in behalf of the Tories at the next general election.

The licensing problem has now narrowed itself down to two points. These are the constitution and powers of the authority to be entrusted with the local administration of licensing system, and the treatment of vested interests in the event of any change. So long as vested interests are at stake, the liquor trade will be actively and continuously on the side of the Tories; and at every election public houses will be centers of Tory influence, and the hundreds of thousands of holders of brewery stock will inevitably gravitate toward the Tory party.

The liquor interest pushes itself into municipal politics with two ends in view, that it may be adequately represented on the magisterial bench, and on the watch committees of the town councils. The watch committees are in control of the police force and determine the conduct of the police in respect to the licensing laws. It depends largely on the watch committee whether these laws are consistently and vigorously enforced. It is therefore important for the trade to stand well with the police, and also with the magistrates; because convictions for selling after hours, for selling on Sundays, for permitting drunkenness, for selling to persons who are drunk, and for permitting licensed houses to become disorderly are liable to endanger the renewal of a license.

The question of the influence of the trade in municipal politics has been gone into with much detail by the royal commission, and taking the country as a whole, the municipal councils and the police have come well out of the inquiry. I followed the evidence given before the commission, and it was then shown that in most towns the magisterial benches and the watch committees support the police in their efforts to suppress drunkenness and disorder, and in dealing with the badly conducted licensed houses. I can recall only three towns where either the bench or the watch committee was seriously in default, and where it was shown that the liquor trade had been able to influence their conduct. It is in national politics that the liquor interest has its greatest power, and it must continue to exercise this power until by some well-considered reform the question is set at rest for many years to come.

(End of Required Reading for March.)

EFFECT OF INVENTION UPON LABOR AND MORALS.

BY EDWARD C. WILLIAMS.

INVENTIVE genius has always been generously rewarded in all countries. The whole universe recognizes the principle so clearly stated by Don Quixote when he said that any man who makes two blades of grass to grow where only one grew before is a benefactor of his race. Anything that will multiply the earning power of human hands; anything that will make our work easier; anything that will give a greater value to raw material; anything that will add to our comfort or convenience; anything that will accomplish something useful that was not done or made before, is a step in progress, an operation of that irresistible law we call development.

A little more than half a century ago farm hands worked from sunrise to sunset for three dollars a month, and as the sun rose later and set earlier in winter than in summer wages were one third less in January than in July. Boys were bound out to give their labor for their board; women were paid one dollar a week for domestic service, which was considered better than twelve cents a day with the spinning-wheel. A man with a loom earned from seventy-five cents to a dollar a day, according to the number of hours he was employed; a carpenter ten cents an hour, a compositor one dollar a day, and a mason got two dollars for laying a thousand bricks. An ordinary journeyman in any trade can earn three times as much to-day in nine hours as he could then earn in twelve. Invention has given him better clothing, better food, better furniture, better beds, better medicine, better tools, books, and newspapers, and greater intelligence. Now he sends his children to free public schools until they are grown to manhood and womanhood, instead of binding them out to farmers or paying mechanics to teach them trades. Invention has provided him a hundred new occupations and has made his home a comfort and a pleasure instead of a hovel. During the last half century the human race has taken its longest step upon this planet, and its amazing progress is due more to inventive genius than to any other cause. Labor-saving machinery enabled our farmers to export 420,000,000 bushels of corn grain last year, it enabled our miners to dig $725,927,047 out of the earth, $64,208,400 in gold, and our mechanics to export more than $700,000,000 worth of manufactured goods. Still more has been accomplished in the emancipation of human thought, which never would have had the opportunity except by the introduction of labor-saving machinery.

Education means freedom; freedom means progress, and progress rewards itself with happiness and contentment.

The first patent granted in America was to Samuel Winslow in 1634 for a method of making salt. Every family in Massachusetts colony was required to pay John Clark ten shillings a year for three years "for the use of his contrivance for saving wood and warming houses at little cost." The first bill introduced in the first Congress was "to protect David Ramsey and John Churchman in the exclusive use of their respective discoveries." A general law for the protection of inventions was passed in 1790. Under it the first patent signed by George Washington, president, and Thomas Jefferson, secretary of state, was issued to Samuel Hopkins "for making pot and pearl ashes." Two other patents were issued that year. In 1898, 46,144 patents were applied for, and 24,275 were granted.

The relations of invention to labor have been the subject of controversy for two centuries, yet there are still people in this world who believe that men who invent labor-saving machinery deprive honest toilers of occupation and take bread out of the mouths of the hungry, just as many still believe that

you will have bad luck if you walk under a ladder, and will escape the rheumatism if you carry a potato in your pocket. There has recently been a struggle between the spirit of progress in the Treasury Department and the labor unions over the manufacture of paper money by machinery. The latter had sufficient political influence to secure the passage of a law by Congress requiring bills to be printed by hand because one steam press, invented by an employee of the bureau of engraving and printing, was able to accomplish as much in a day as twelve plate printers with their old-fashioned hand-presses, and it was feared that when this fact was demonstrated eleven out of every twelve would be discharged.

It is undoubtedly true that almost every labor-saving machine invented has displaced a number of persons by making their employment unnecessary, but it is almost the universal rule that it has furnished employment indirectly for many more. This fact has recently been demonstrated in an extraordinary manner by an investigation made under the direction of Col. Carroll D. Wright, United States commissioner of labor, whose report now lies in manuscript at the government printing office. As a basis of calculation 672 distinct occupations were taken, and the effect of labor-saving machinery upon them was carefully calculated to ascertain the difference in cost, the difference in time, the number of people employed, the comparative value of the raw material used, the comparative value of the finished product, the moral effect of the machine, its influence upon wages, the number of operations required to produce the finished product, and every other tangible difference between hand and machine-made merchandise.

Some of Colonel Wright's discoveries were remarkable. For example, in lithographic art work you can produce for $1.34 by machinery what will cost $134.47 by hand. You can make as many cigarettes by machinery for $8.14 as you can make by hand for $96.44. For $1.55 you can load as much iron ore or coal as it would cost you $40 to load by hand. A similar rule applies to loading grain, cotton, coal, and similar freight. In lettering signs you can accomplish for forty-two cents by machinery what will cost you $200 by hand. You can make as many curtain poles for eighty-six cents by machine as you can make for $186.50 by hand. For twelve cents you can print as much wall paper by machine as you can print for $43.75 by hand. You can set as much type by machinery for $4.40 as you can set for $41.60 by hand. You can do as much magazine and book press-work for $4.62 as you can do for $302.50 by hand, and the same amount of newspaper press-work that costs $5.60 by machinery would cost $236.52 if done by hand. You can make as many nails for twenty cents with a machine as you can make for $7.04 by hand. These are a few examples picked at random from the report of the labor bureau on this subject, but equally striking comparisons may be found within the vision of almost every citizen.

The railroads offer the grandest illustration of the expansion of labor by invention. By disposing of the stage-coach and the stage-driver, the hostler, the harness-maker, the coach-builder, and the blacksmith, they furnish employment to three fourths of a million people, who support nearly four millions, or one sixteenth of the entire population of the entire country. The application of iron and steel in the building trades, in great engineering undertakings, has displaced a great deal of labor in one direction, but has furnished occupation for one hundred times as many. The increase in the number of people employed in manufacturing, mechanical, and mining industries has been four times as great as the increase in population. The increase in the consumption of iron and coal has been in an even greater ratio. In 1830 the consumption of cotton in this country was 5.9 pounds per capita. In 1890 it was nearly 19 pounds, which is the direct result of inventive genius applied to the improvement of machinery used for the manufacture of cotton fabrics. In the days of the hand wheel, one spinner working fifty-six hours could spin five hanks of No. 53 twist. At the

present time with one pair of spinning machines one spinner can produce 55,098 hanks in the same time. In the olden times, one adult weaver with a hand loom could produce forty-two yards of common shirting per week. With a machine one man can now produce 1,500 yards a week.

In the spinning of carpet material it would take by the old methods from seventy-five to one hundred operatives to turn out the same amount of work that one operative turns out to-day, while in weaving there would be required at least ten times the present number. A large broom concern a few years ago produced 500 brooms per week with seventeen skilled men. To-day with nine men it turns out 1,200 dozen brooms per week. In the manufacture of clothing and boots and shoes the same progress has been made. A first-class workman could formerly turn out six pairs of shoes in a week. He now turns out eighty pairs. By the use of the Goodyear sewing machine one man can sew 250 pairs of shoes a day; by the use of the McKay machine one operator can finish 300 pairs of shoes in one day, while without the machine he could finish only five pairs. A perfecting printing press, such as may be found in the office of all well-equipped daily newspapers, will print, fold, cut, paste, count, and number 48,000 eight-page papers in one hour. To do this press work alone on the old plan, a man and a boy would have to work ten hours a day for one hundred days with a hand-press.

Similar illustrations might be recited in every direction, in the manufacture of furniture, glass, leather, lumber, in every form of metallic goods, wooden ware, musical instruments, in oil, in paper, pottery, the production of railroad supplies, the manufacture of rubber and silk goods, tobacco, trunks, in building vessels, in making wine, in the production of woolen goods, and in every line of human industry. For example, thirty years ago ordinary printing paper was sold on the market at from twenty to twenty-two cents a pound. By the invention of what is known as the sulphite process, a better grade of paper can now be furnished for two cents a pound, and there are in the United States 1,000 mills whose united capacity amounts to 2,000 tons of print paper a day.

In wood-working there have been improvements even more marvelous. A single factory in Maine makes 500,000,000 packages of wooden toothpicks a year, and 5,000,000 packages of the wooden skewers which are used by butchers and housewives to pin meat. There are seventeen spool factories in Maine which turn out annually 300,000,000 spools, which are shipped to the thread factories, where 50,000,000,000 yards of thread are wound upon them. One girl, under sixteen years of age, can wind 5,000,000 yards of thread in a day of nine hours. The timber used in making these spools is worth about $500. One little factory in Maine, which is very properly called "a novelty mill," turns out annually 8,000,000 sets of checkers, made from logs of the white birch tree, which are worthless for lumber. One remarkable product of this novelty mill is the sawdust, which is even more valuable than the wood, and is sold by the pound for moldings.

The invention of "the slicer" has probably escaped the attention of everybody who is not personally interested in novelty mills, but the results of it are felt and appreciated by every housewife who goes to market. When she purchases her pound of butter the grocer puts it in a little wooden dish. The baker sends her the pies and cakes on thin wooden plates. Pickles, cottage cheese, and other dairy and grocery products are packed in the same way. We buy our grapes and berries in boxes of the same material. The fruit and dairy trade has been revolutionized by the inventor of the slicer. More than 25,000 people are now engaged in making thin baskets, boxes, and crates from ribbons of wood which are cut from sawlogs. More than 200,000,000 butter dishes are needed to supply the market, and more than 500,000,000 berry boxes, but no labor has been displaced.

In amateur photography another field is found of remarkable magnitude. Ten years ago there were only five firms in the United

States engaged in the manufacture of such lines of goods. Now there are seventy large establishments, using a capital of more than $20,000,000, and turning out supplies for the use of more than 1,000,000 amateurs who own kodaks and other cameras. One factory turns out 15,000 cameras every month.

Nine thousand men are to-day employed in manufacturing what are known as office specialties—labor-saving devices for the use of lawyers, doctors, bankers, insurance companies, real estate agents, and others. A single firm in New York employs 1,500 men and $3,000,000 in capital in this business.

The modern method of peddling steam by pipes running through the streets in our cities has enlisted the use of $22,000,000 of capital, and the employment of more than 6,000 men.

The ice factories of the United States have displaced considerable labor that was formerly engaged in sawing ice upon the rivers and ponds of the country and packing it in sawdust in the great ice-houses. But they give employment to twelve thousand machinists and mechanics in an entirely new line of industry.

In 1889 there was produced in this country 1,612,576 pounds of wire nails, valued at $157,389, or an average of nine cents a pound. Last year we consumed over 200,000,000 pounds and exported 23,000,000 pounds of wire nails, which cost an average of two cents a pound.

The manufacture of coke has been so much improved that nowadays it is claimed that by one of the processes a manufacturer can buy his coal, turn it into coke, give the coke away, and still make a handsome profit on the transaction by the sale of such by-products as tar, ammonia, and sulphur. During the last eighteen years Pennsylvania has increased her product of coke 300 per cent and the South 100 per cent. In 1882 six Southern States produced 372,430 tons of coke, which is about equal to the product of Tennessee alone last year. In 1897 the same states produced 3,807,255 tons. In 1882 West Virginia produced 230,398 tons of coke, and in 1896, 1,649,755 tons. In 1882 Pennsylvania produced 3,945,044 tons, and in 1896, 7,356,502 tons.

In 1890 the Westinghouse street-car motor was introduced for the first time. On the 1st of January, 1899, over 20,000 were in use, representing the power of 650,000 horses. If one were to harness 650,000 horses twenty abreast they would reach the entire length of Broadway, New York, from the Battery to Central Park, and their united strength would represent that of the Westinghouse electric motors now in use. These motors are manufactured by 6,000 men in a factory that covers twenty-four acres, and no hand has been displaced by them. The product and the capacity of the General Electric Company at Lynn, Mass., and Schenectady, N. Y., is even greater.

The first electric car was put in operation a little more than ten years ago. In 1897 the mileage was 13,765, the capital invested was nearly $1,000,000,000, and the number of employees was 166,000.

The manufacture of electrical machinery and apparatus is another great industry, one of the largest in the United States. Probably not less than $500,000,000 is invested in its production, with an equal amount in the production of light and power.

The Westinghouse air-brake factory at Pittsburg covers an area of ten and one half acres, and turns out a complete set of air-brakes every minute, valued at $40 each for freight-cars and $100 each for passenger-cars. The annual product of that factory could equip 250,000 freight-cars, 6,000 passenger-cars, and 10,000 locomotives. The cost of the brakes now in use on freight-cars alone was $35,000,000, on passenger-cars $4,000,000, and on locomotives $9,000,000.

The manufacture of bicycles is another great industry. In 1895 more than $100,000,000 and over 50,000 workmen were employed in their production, and the output in 1897 was over 1,000,000 wheels.

Paper bags were invented in 1881, and they have probably saved more labor in

wrapping and tying packages than any single invention.

The cash-register industry has also assumed enormous proportions. In 1895 the number in use was over 100,000, valued at $16,000,000, while the cash carrier industry in the five years between 1890 and 1895 grew to such an extent that three of the leading companies had on rental not less than 30,000 systems.

The invention of the graphophone has furnished occupation for more than 10,000 people. It was only the other day that we read of the most spectacular of American industrial triumphs, when a Chicago manufacturer made a contract to build 1,500 automobiles, or horseless carriages, to be used in France.

No labor-saving device for the office has met with a higher degree of success or popularity than the typewriter, and none has contributed more to the prosperity of the country. It has revolutionized business methods. It has created a new field of labor for women. There are now forty-seven schools in the city of New York where typewriting is taught, at which 11,000 pupils have "graduated" within the last ten years. Every city in the country has a corresponding number of schools, without reference to the hundreds of thousands of operators who have learned to use a machine without instruction. There were sold in the city of New York to the local trade last year 39,000 typewriting machines. It is probable that 100,000 people earn a living by their use in that city alone, with a corresponding number in every other city, town, and village in the United States. The use of the typewriter has made necessary the invention and manufacture of various furniture, appliances, and stationery which were not needed before, and the increase in the postal revenues caused by the introduction of the typewriter has been enormous. People now write five letters where they used to write one.

There are in daily use over 5,000 typesetting machines, which are controlled by finger-keys like a typewriter. Instead of producing single type of the ordinary character they cast type metal in bars or slugs, each complete in one piece, and having on the upper edge the type characters to print a line. After use, the linotypes, instead of being distributed at great expense like ordinary type, are thrown into a melting pot. These machines are now found in every civilized country, and in every large establishment devoted to newspaper, book, or miscellaneous printing, and the membership statistics of the typographical unions show that the number of hand printers has increased instead of diminished.

The history of the sewing-machine is well known. When it was first invented almost universal prejudice was excited for fear it would deprive women of the opportunity of earning a living, but the reverse has been the case. With the increase in the manufacture of machines the field of female labor has been expanded until there were never so many machines and never so many women employed as at the present day. The value of the sewing-machines manufactured annually exceeds $12,000,000.

The influence of the telegraph and the telephone upon labor is apparent to every one, but some of the indirect results might be overlooked. For example, the consumption of copper wire has made copper mining profitable, and the annual product now amounts to about 300,000 tons, valued at $40,000,000. Thirty years ago there were only 3,000 telegraph offices and 75,000 miles of wire in this country. At present there are more than 25,000 offices giving employment to over 40,000 operators, and more than 1,000,000 miles of wire are in use. In 1870 the number of messages handled was 5,879,282; in 1898 it exceeded 80,000,000.

A broad field for conjecture is offered by the improvements in agricultural machinery, plows, harrows, planters, seeders, cultivators, harvesters, and threshing-machines. Flour milling has been revolutionized by the invention of the roller process. By the aid of these inventions a farmer to-day can accomplish four times as much as he could do in the same time twenty-five years ago.

The patent office is the place to study progress, and to recognize the great advance that has been made in civilization during the last twenty-five years—greater than at any similar period of the world's history. If we were thrown back only a decade we would find ourselves deprived of numerous comforts and conveniences and labor-saving machinery, which have become necessaries of life, and whose value would be fully realized if we were now to be deprived of them.

The inventions having the greatest commercial value are the cotton gin, the sewing-machine, the self-binding harvester, barb-wire fencing, the roller flour-mill, the sulphite paper process, the telephone, the application of electricity to light and power, the typewriter, the bicycle, photography, the cash register, aluminum, and the basic steel process, by which they produce steel free from phosphorus, and therefore capable of being worked when cold. The fear that these inventions, which have revolutionized industry, would deprive people of employment has not been realized. On the contrary, they have opened new fields and created a demand for labor that is unprecedented. The capital invested in manufacturing industries increased over 120 per cent from 1880 to 1890, or from $2,780,766,895 to $6,139,397,785. The number of employees increased from 2,700,732 to 4,476,884. The average yearly wages of employees, which in 1859 was but $247, increased to $429 in 1890, and even a greater increase will be shown during the present decade.

The effect of labor-saving inventions upon the morals and the manners of men is a favorite subject for the discussion of sociologists. It is the unanimous opinion of those who have given this subject study that the moral condition of the laboring classes has improved quite as rapidly as the machinery operated by their hands. Low grades of labor are constantly giving way to educated labor. Ignorance has given way to intelligence, refinement has displaced vulgarity. Selfishness and dishonesty have become disreputable among those whose employment requires education, intelligence, and skill. As Colonel Wright says:

> We are living in the age of intellectuality, of brains; for brains is king, and machinery is the king's prime minister. Invention has brought with it a new school of ethics. It is the type and representative of the civilization of this period, because it embodies so far as physics and economics are concerned the concentrated, clearly wrought-out thought of the age. Books may represent thought, but machinery or invention is the embodiment of thought. . . . If the lowest grade of employment leads to self-respect and the dignity and repose which come of self-support (a proposition which cannot be denied) how ennobling must be that employment which not only stimulates the highest faculties, but also excites admiration for the perfect and a love for the beautiful. A man cannot superintend the movements of a complicated piece of machinery and not feel a silent working influence and become better for his experience. There is something educational and elevating in the very presence of the working of mechanical powers. These things stimulate industry. If labor or employment of the mind is essential to good morals, then the highest kind of employment, that which requires the most application and the best intellectual effort, means the best religion and the best morals.

MISOGAMY AND ITS CAUSES.

BY RICHARD MULCKOW.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE GERMAN "UEBER LAND UND MEER."

STATISTICS with their inexorable numbers show that there are considerably more women than men. Therefore it is evident that all women cannot marry. But the percentage of marrying girls and of young widows who do not contract a second marriage is higher than the former surplus and, moreover, will be greater from year to year. So consequently the number of unmarried men will be constantly larger, and, as it unfortunately appears, in continually ascending progression. The causes of this unsatisfactory phenomenon are not so clear and simple that its explanation will be an easy one. It is certain that many men remain single because they have determined by a simple calculation that they could not continue their present manner of living in a comfortable way and must dispense with many things to which they are now accustomed.

Of the men who offer this reason only as an excuse and behind it conceal their unbridled selfishness, we will not speak here at length. They hate every constraint and every care which does not pertain to themselves. They have no interest in wife and children and family and do not marry from pure ease and indifference. They are evidently predestined bachelors. But the other thoughtful accountants who are in no way indifferent to marriage are not set aside so easily, because their scruples against such a conclusion, according to the present relations of life, are in no way unfounded and should be earnestly considered.

Increasing prosperity and the progress of modern education have increased the demands of girls from well-to-do circles and press into the background the old principle that they must prepare themselves for marriage. Women do not generally keep accounts, and for the most part invest in the dowry much higher sums than would be necessary. A rich establishment and an elegant dwelling house necessitate a costly mode of living that is not approved of nor desired by many men intelligent and honorable, especially by those who have attained their station solely by their own work and their own merit. The increased demands of the women which often go hand in hand with vacuity of mind and indifference to earnest work, perplex many a stanch young man. He fears an uncertain household management, he fears fashionable folly, show, and superficiality which he has often enough had an opportunity to observe.

That which is striven for primarily in the education of our girls is a vigorous mental discipline and a systematic training for simplicity and unpretentiousness in the conduct of life. Every pride, every caprice, and every progress which boasts of station and power must be earnestly reproved and corrected. It must be emphasized and made prominent that modesty and simplicity are the greatest jewels in the crown of womanly virtue, whose worth will be valued so much the higher the more secure are the external relations in which these virtues are developed. From this it follows that one has to avoid every ostentation in the external conduct of life and place a value on a modest sociality which does not like gay representation and glittering festivities, but is in accord with a circle intellectually united, on whose banner is inscribed a respect for intellectual work. Such an education striving for the inner deepening has become a pressing necessity for the unmarried daughters of the so-called better classes, because without it they are unable in the least way to guide their life ship if the support should be snatched away from them. By modest thought, by earnestness and strength of soul and a certain measure of gentleness

and noble womanhood, many a maiden may overcome the misogamy of a man who in various ways has learned the pampering, the great pretentiousness, the coyness and boasting, and those faults now avoided by young women because they obstinately stand in the way of the redeeming, conciliatory force of social life. An earnest, thoughtful woman will most easily relinquish a brilliant position in life and find her greatest happiness in the quiet, comfortable family life.

It is certainly true that many men even to-day seem not to take into consideration for marriage the working and sensible woman of the higher stations largely because they fear the independence of these women, and prefer, therefore, to win the beautiful, rich girl, endowed with superficial talents, but they care very little for the sturdy characters who are able to face earnestly every situation in life. One could simply ignore this state of affairs or could explain it by the intellectual superficiality or the weakness of these men if it were not for another unfortunate circumstance which arouses earnest thought. Many mothers oppose indifferently the education of daughters, hoping that they will easiest be married if they, untouched by the moving spirit of the times, do not seriously concern themselves with preparation for an earnest life by earnest labor. Such an indifference cannot be severely enough opposed, for when the bloom of youth is passed and the hope of a suitable alliance has not been fulfilled, then the mother is helpless, and the daughter without any inner defense is exposed to the difficulties of life. That is so much the worse as the number of girls wholly indifferent to every earnest activity is by no means a trifling one. They have no serious interest and see their life calling in the ease and pleasure of their existence.

That philosopher is wrong who exhibits this superficial mind as the product of the present school discipline. However one may consider the result of the present education of girls, it can be denied only by the novice that the school with its serious intellectual discipline which strives to penetrate every important subject, is earnestly struggling against such frivolous and indifferent conduct of life. Often such endeavors have been successful, especially when the discipline of the school is upheld by that of the home; in other cases every frivolous thought, every timidity is not easily expelled by regular work and faithful performance of duty.

Experience now confirms the fact that those girls who are indolent, careless, and indifferent in school have no interest in home and domestic affairs, and nothing can be accomplished by sending them to school for learning household work and to cooking schools. Evidently they have no serious interest in life and listlessly and timidly oppose labor. On the other hand, the clever and intellectual girls in many cases willingly make themselves useful in the house and in the housekeeping and find in this joyously accomplished, practical work the normal and rational adjustment of their intellectual labor. That a deeper education excludes the thought of household matters can be maintained only by those who have had no experience in this field and base their decision on untenable theories or impulses. Franz von Holtzendorff said in one of his essays very truly: "Not a few fathers are short-sighted enough to believe that the diminished skilfulness of their daughters in housekeeping arises from the fact that they have learned too much; but the truth is that they have learned entirely too little and shun every vigorous course which would prepare them for a clear knowledge of their motive in life and for a free and independent management of household affairs."

In fact the opinion longest confuted, but always coming up again, that domestic affairs must suffer under the intellectual, educated woman because she would demand too much of her intellectual interests, descends only from individual disagreeable impressions and experiences, and perhaps also from certain ineradicable prejudices which are stubbornly opposed by the better judgment. It is much more the external educational veneer, the shallow and sham educa-

tion which is yet conducted in many boarding schools and institutions which make the girls unpractical, undomestic, thoughtless, superficial, and pleasure-seeking.

This superficial method of training, which is still much in favor, cannot seriously incite and fascinate the girls, and dispose their hearts and thoughts to serious things. It makes the young natures shallow and leads them into the way of indifference and superficiality which a serious intellectual discipline seeks to avoid. The girls, those too from the peasantry, are educated not for a useful, joyously active life, that is for wives, but for "ladies." They watch and study carefully what the so-called good society demands; they see how the daughter of the privy councilor or of the councilor of commerce does, how she walks, stands, speaks, gesticulates; and then they strive to imitate as closely as possible all these externalities that they may have the good fortune to be considered women from a fasionable home. That is the principal study of very many of the young girls growing up under the favor of their parents and is one of the greatest blots on the present education of girls.

The more zealously we work for the intellectual emancipation of the female sex, the sooner will it be drawn into an active interest in the intellectual life of our people, and the more convinced one is that the moral and intellectual activity of the woman is the foundation of the prosperity of our whole race, so much the more persevering and energetic must be the warfare against that education which anticipates only a wholly exterior "art of representation." All too imminent is the danger that the girls growing up look upon this representation in itself as if these externalities constituted the only merit of education, and life must offer to all of them copious opportunities to display all these cultivated manners. And such a conception suggests also the pretensions which one becomes acquainted with by the representations of the imitators. One longs for elegant toilets, companionship, and travel and is then disappointed and unhappy if the unpolished, the by no means satisfactory life disclaims such pretensions and—the hoped-for wooer will not come. Independent thought and judgment are the things which arm women for every condition in life and make her appear to the clever man a suitable companion, naturally supposing, however, that all the mystic relations are added which bind the cord of love and sympathy from heart to heart.

It is very strange, when one considers in connection with the woman movement the decreasing desire of the men for marriage and expresses it openly, that the women by open competition with men are antagonizing the whole male world and discouraging them from a marriage relation. If one investigates with a certain knowledge and with frankness the previous development of the woman question, then this must be admitted; that constituent element of women which withdrew from the traditional path and recently opened the vocations until now unconventional, is with decreasing exceptions a very superior one in respect to perseverance, will power, and intelligence. But there is no ground for supposing that these women, if the right men had approached them, would conduct the house and household affairs with less fidelity and care than the profession which they have chosen. That these women would refuse purely from principle and for the good of the cause, a sturdy man worthy of love who came to them with a serious desire and hoped for his life happiness from them, I cannot believe, although individual women are said to have expressed this peculiar purpose. In individual serious cases, such a principle, because unnatural, would be broken down.

It is foolish and wrong to say that the women of the present are influenced by a morbid desire to withdraw the force of their lives from the family and that this morbid appearance must be seriously combated. At best one could say that women strive for the right, to do it whether the circumstances or their one personal desire make it necessary. It would be a very great injustice to deprive women of the possibility of earning their own living otherwise than in the conventional path, for no one can doubt whether

it is more respectable to lay the hands in the lap and wait for a suitable party or to prepare one's self by his own strength for every situation in life. That the world and our family relations would not suffer thereby is proven by the important fact that the number of those natures seeking independence will be a comparatively small one and will remain so in the future.

On one point the leaders of the women movement are in danger of going too far and thus arousing the opposition, perhaps also the misogamy of many well-meaning men. The woman teachers, physicians, philologists, etc., are often praised beyond all bounds as the model of their sex and placed above our housekeepers, whose activity is pointed out as banal and insignificant. We can express very high respect for the woman who attempts in previously unconventional fields of labor to take her share in the solution of questions of culture, but it must be indisputably maintained that no activity is richer in blessing and more significant than their work and management in house and family. One feels a real satisfaction when intellectual and progressive women themselves make this assertion.

THE UNDERGROUND RAILWAY OF BOSTON.

BY JANE A. STEWART.

BOSTON has recently completed a remarkable piece of work in its underground railway. This achievement is noteworthy for many reasons. Aside from its unqualified success as an engineering triumph, it is a notable feat from the fact that it has been accomplished by a commission representing the people; that it is owned by the people; and constructed solely for the comfort and convenience of the people.

The structure has involved the wise handling of millions of dollars and the management of vast property interests. Great engineering difficulties have been overcome. Hundreds of workmen have been employed. The work has been successfully completed within the limit of time and with a large balance in the treasury. That all this has been so effectively achieved without a suggestion of "jobbery" is a hopeful and significant sign of the times.

It was the modern problem of urban life —congestive at the central arteries of travel—which brought the subway into existence. It does not claim to be a cure. But it has proved an effective palliative.

There was evidence enough that the civic forefathers, with all their undoubted wisdom and foresight, had not anticipated the needs of the twentieth century Boston. The buildings have stretched toward the sky to accommodate the growth of population. But the narrow, medieval streets in the heart of the city have long been inadequate for the full tide of traffic. Car blockades became hourly occurrences. The streets were distressingly choked. Something had to be done.

Among the many mooted measures—street widening, alley routes, elevated roads, traversing the Common—the subway plan of removing the major part of the strain and stress of travel from the surface seemed most desirable. Its advantages were convincing. There would be little destruction of property. The streets would be more clear of impediments (tracks, posts, and wires) and consequently less dangerous to pedestrians and affording greater freedom in case of fire. The noise of cars would be taken away. Greater speed would be possible. The danger from grade crossings would be entirely eliminated by sub-subways. The descent, sixteen feet, would be less than the ascent, nineteen feet, to an elevated road. The capacity for travel and chances for a seat would be increased threefold. In stormy or extreme weather the subway stations would afford protection. Then, too, there were some

SECTION 2 IN PROCESS OF CONSTRUCTION.

items of saving to be considered: in power, in maintenance of track, roadbed, and electric line; in time. There would be no need for removal of snow and ice; no danger of damage suits; and there would be a greatly increased revenue.

But, on the other hand, stupendous difficulties were presented. There was danger of undermining. The expense of construction would be a large and risky investment. Conservative people disapproved. Only two newspapers indorsed the plan. When the subway project finally carried by vote of the people there was a large *clientele* ready to say "I told you so" at the first intimation of expected disaster.

But failure was not forthcoming. The city was fortunate in the choice of men of high character and ability for the management of its enterprise. The Transit Commission, organized in 1895, is composed of George G. Crocker, Charles H. Dalton, George F. Swain, Horace G. Allen, Thomas J. Gargan, B. Leighton Beal, and Howard A. Carson. The chairman, Mr. Crocker, may be taken as a typical member of the commission. He is a native of Boston, a graduate of Harvard, and a lawyer by profession. He has served as member of the state legislature and was president of the state senate. As chairman of the state board of railroad commissioners, he was directly concerned in measures promoting the safety of passengers and employees—in the abolition of grade crossings and car stoves. The chief engineer, Howard Carson, is a graduate of the Massachusetts Institute of Technology. The city has had his service as superintendent of its main drainage system and as engineer of the sewer systems of the Charles and Mystic Valleys. The commission as a whole is made up of men of integrity who are identified with large interests. At its headquarters on Beacon Street were wrought out the well-laid plans which have been carried to successful completion.

The legislative act authorized the Boston Transit Commission to spend seven million dollars for a subway under Boylston and Tremont Streets, and under various streets in the north part of the city to the Union Station. They were also empowered to construct a tunnel to East Boston and to

purchase right of way for an elevated road from the junction of Shawmut Avenue and Tremont Street to Franklin Park. This included the building of the new Charlestown and West Boston bridges (now in process of construction), with a view to their use for transit purposes.

Although municipal ownership was intended, the act did not go so far as to include municipal operation of the new subterranean highway and its accessories. As it was understood that the "West End Street Railroad Company" (since changed to the "Boston Elevated Railway Company") would be the probable lessees of the subway, all plans were first approved by them before contracts were made, thus insuring harmonious and satisfactory conclusions.

Work on the subway was begun March 28, 1895. Ground was broken on the Public Garden, August 15. The portion of the work thus commenced—from Park Square to Park Street—was completed and opened September, 1897. It was by far the easiest of construction. The engineering problems, as the work could be in open cut, were of an ordinary nature. But with the inauguration of the northern part of the work, opened last September, the obstacles were greatly increased. There were pipes, sewers, and many other obstructions to be provided for. The conditions imposed by the legislative act—that the streets be kept open for traffic from eight in the morning until six in the afternoon—further complicated matters. A vast amount of preliminary surveying was essential to determine depth and character of the adjacent foundations, the distinctive qualities of the soil, and other necessary data. From the careful borings and excavations, a complete underground map was obtained of the entire distance to be traversed from Park Street to the terminal at the Union Station, on Causeway Street.

EXCAVATING IN SECTION 7.

In considering the important subject of construction, the commission was greatly aided by the experience of foreign cities as personally investigated by Chief Engineer

Carson. Cast-iron tubes are used in the Glasgow District Railway tunnels, and by the London Underground road. The masonry arch was adopted by that model of construction, the Chemin de Fer de Sceaux of Paris. Uniting the best qualities of these, the commission decided upon the combined masonry and steel-work type. This style of structure has also been commended by the engineers who have in charge the plans for New York's proposed great subway.

THE INCLINE IN THE PUBLIC GARDEN.

In the Boston work, the framework is formed of steel posts, three feet apart, on each side, with steel roof-beams across the top. The inverts and foundations are laid in concrete. The side walls are built of Portland concrete masonry in which the steel side posts are so embedded as to leave a thickness of two inches of concrete in front of the posts. They are further protected by the usual waterproofing of cement, plaster, and asphalt. The walls vary from twenty-one to twenty-four inches in thickness. In the two-track sections, refuge niches are hollowed out of the concrete side walls, at intervals of nine feet. At stations the walls are faced with white porcelain brick or tile, which has an exceedingly bright effect. The steel columns supporting the roof in the four-track sections and at platforms are encased in concrete and painted white like the brick-work and exposed steel-work of the roof.

For the method of work, no established precedent was followed. The part under the Common was excavated in open cut, the material being hauled away by teams up an inclined plane to the roadway and deposited on the low ground in the Common and Public Garden, incidentally a great improvement to the portions thus treated. The "slice" method of excavation was mainly used. Under this plan portions of the structure were built separately, insuring a minimum of danger from settlement and greater ease in handling gas, water, and sewer pipes. Small movable derricks, on wheels, and inclines were utilized to excavate a trench about ten or twelve feet wide,

EXIT AND ENTRANCE AT THE CORNER OF PARK AND TREMONT STREETS.

nineteen feet deep, and varying in length according to location and traffic. These trenches in the Boston work were generally opened at night and bridged over for travel during the day. Then followed the putting in of the eight-inch back walls, setting steel side posts, building side walls, and the necessary portions of invert on which these rest.

As soon as a sufficient length of opposite side walls had been completed, the intervening earth was removed in "slices" to a depth of six feet to allow of the steel roof-beams being laid across. Spaces from twenty to thirty feet in length were frequently opened up in a single night so as to allow of the lowering of roof-beams into place and the bridging of the street surface in time for the resumption of traffic next morning. As soon as the roof-beams were riveted in place, the brick jack arches were turned between them. The concreting, plastering, and waterproofing of the roof then followed. The temporary bridging was removed. The street surface was backfilled and repaved.

Beneath the roof-beams, the earth core was then excavated and carted away. The lower and upper inverts of Portland concrete, about sixteen inches thick, with waterproofing, were next completed, and a gutter formed in the center for the drain pipe. The subway was then ready for the finishing touches.

The equipment of this interesting subavenue is naturally of the most modern and approved description. The legislative act forbade the use of any motive power except electricity, compressed air, or some agent free from noxious products. Under existing arrangement of an alternating circuit it is very improbable that any trouble which might arise would cause the subway to be left in darkness. The rails are of the standard for steam railroads. The overhead trolley construction is of the best description. The stations are fitted with four ticket offices at the foot of the entrance stairways. At the exit staircases are placed turnstiles which permit exit but bar entry to the platform. There is a complete system of fire-piping.

Perhaps the most unique feature of Boston's subway is the arrangement for ventilation. In respect to good air the underground street railway of Boston cannot be rivaled by any of its foreign contemporaries. The City and South London Railway, three and one half miles long, consists of two cast-iron tubes, about ten feet in

diameter. Through these tunnels, at an average depth of fifty feet, the cylindrical cars are run by electricity. Each small car pushes, piston-like, a column of air before it, the vacuum being supplied by fresh air from the rear. If it was not necessary to close the cars on account of the draught the arrangement would be completely satisfactory. But by reason of their small size the air within them soon becomes impure, although that in the tunnel is good.

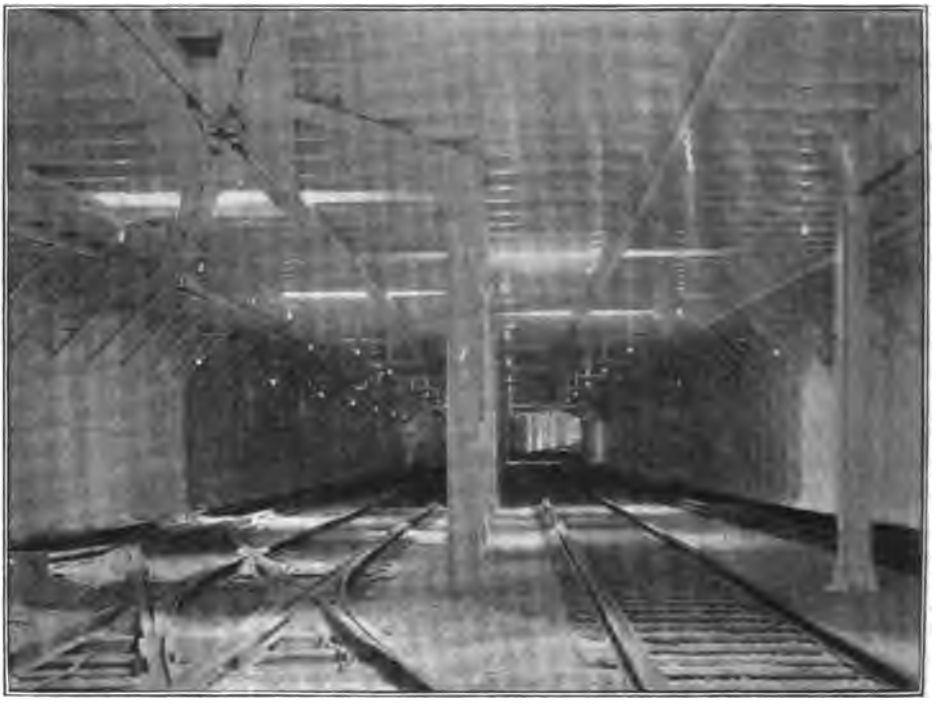
The tunnel under the Mersey at Liverpool presents an example of artificial ventilation. Its two stations are eighty feet underground and about a mile apart. Near each of these stations there are ventilating fans which draw the vitiated air from the tunnel, fresh air to supply the requirement passing in through the stations. The tunnel, however, is traversed by steam cars, which render almost any system of ventilation practically ineffective.

In addition to the absence of steam and smoke, the Boston Underground Railway has the advantage of a scientific scheme of ventilation. Eight ventilating chambers are constructed at various convenient points along the route. One of these, for instance, is located under the sidewalk on the southerly side of Hanover Street. It is a concrete chamber for the reception of a ventilating fan and motor. The opening in the sidewalk through which the air from the subway is discharged by action of the fan measures twenty-four feet by five feet and is covered by an iron grating.

The Boston subway, as completed, is one and two thirds miles long, with five miles of road, reckoned as a single track. Where there are four tracks, as in Washington Street, the subway is forty-eight feet wide and presents the appearance of a brilliantly lighted sub-street with rows of steel columns down the center. The two-track sections measure twenty-four feet in width and give no sense of oppression or confinement as one rolls rapidly along. The roof, as has been indicated, is fourteen feet above the tracks and three feet under the surface, necessitating a descent of only sixteen feet to the platforms. From the Union Depot terminal, the cars descend

TICKET OFFICES IN PARK STREET STATION.

the incline, stopping first at Haymarket Square station; thence they proceed under Washington Street to Adams Square station, where there is a loop; from there along the two-track section under Brattle Street to the station in Scollay Square. From Scollay Square the cars traverse one of the two tracts under Tremont Street to the important central station at Park Street, where all transfers are made and where there is another loop for all cars which do not run north beyond this point. Boylston Street station is next, where the subway branches in the one direction under Tremont Street and in the other beneath the Common to Pleasant Street and the Public Garden incline terminals.



THE FOUR-TRACK SUBWAY UNDER TREMONT STREET MALL.

Boylston Street station presents an interesting feature in the sub-subway. At this point the Tremont Street car tracks run in a separate section depressed seven feet to run under the Boylston tracks, thus avoiding the dreaded grade crossings.

In addition to this precaution the platforms are so arranged that a passenger cannot cross the tracks on the level, a proscription absolutely essential in all rapid transit plans.

At the Union Depot terminal the movement of the myriads of cars is regulated by systematic method from a railroad switch tower. Subway motormen must become conversant with railroad signals, which are shown by the usual colored lights at night.

Intelligent and well-considered as the Boston Underground Railway plans have been, there still remain some minor problems to be solved. The peculiar roar induced within the subway by the cars as they speed rapidly along is a positive source of discomfort. Various suggestions—rubber coatings, etc.—have been tried without relief. The problem of transit for the lessees inheres in an equalizing of fares, that passengers from all directions may be justly and equitably served. The tendency to run cars too close together at busy hours suggests a source of danger to be avoided. The comfort and best interests of the people have manifestly been the prime object sought by all concerned in the evolution of the subway. What it has already accom-

plished in alleviating travel pressure on the city thoroughfares is a source of congratulation. Forty per cent more people can be served than was done by the surface system. The thirty millions who are annually carried over some part of the route now commanded by the subway will reap an incalculable benefit in saving of time.

During the first year of the use of the subway as a whole the number of passengers taking and leaving the cars at Park Street station alone is greater than the aggregate number of passengers entering and leaving the city by all the steam roads which are this spring occupying the magnificent new South Union Station. Ample provision has been made for all demands excepting perhaps at the crowded morning and evening hours and at holidays. To provide permanently for these, the commission claims, would have meant construction on a scale that would be at ordinary times an undue tax and inconvenience. The fact was not anticipated, as it has been demonstrated, that people would walk to Park Street, three blocks distant, to insure seats rather than to take a crowded car at Boylston station. Various devices have been employed to relieve the unforeseen congestion thus entailed. People were often unable to get through the crush to their cars. The difficulty has now been greatly minimized by an enlargement and a division of the platform into sections. A signal board worked by an attendant announces the coming cars and their location.

THE SUB-SUBWAY OF SECTION 2.

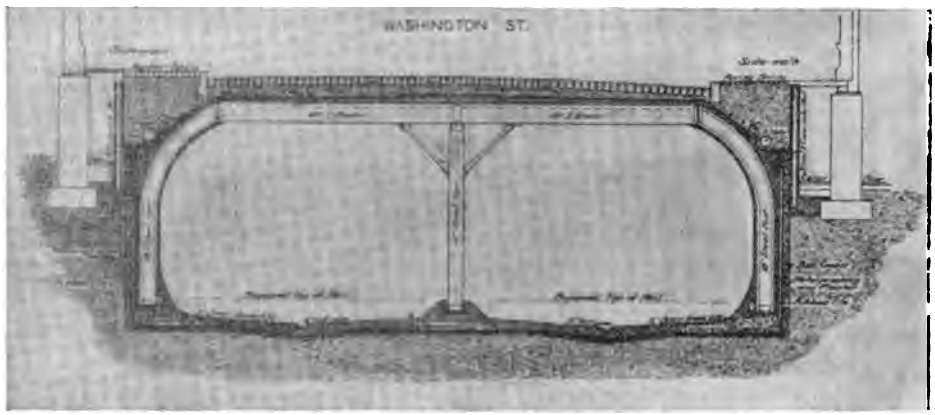
Financially, as has already been stated, the management of the subway is above criticism. The estimates placed the cost of construction and real estate at seven millions. There has been expended for material and work $4,686,000; for real estate, $1,100,000. The Boston Elevated Railway Company, which has leased the road for twenty years, will pay the city annually a sum equal to 4⅞ per cent of the net cost of the subway. This insures ample provision for the interest on the subway bonds and for the sinking fund. The bonds run forty years and were sold at a pre-

mium which has already placed a large sum in the sinking fund.

The next steps in the work, as soon as the West Boston and Charlestown passenger bridges over the Charles are completed, are to extend the subway under Cambridge Street to connect with the first-named bridge; to build the contemplated elevated roads, for which these bridges are being planned, and to construct the tunnel from Hanover Street to Maverick Square, East Boston. Permission for the last named has been received from the river and harbor authorities at Washington. Soundings are already made. The estimated cost of the East Boston tunnel is two and a half million dollars. It will not be ready for traffic before 1902. The Transit Commission will hardly conclude its labors before a sub-surface and elevated transportation has been provided for the whole city.

Visitors to Boston to-day will find, as the only noticeable surface indications of the subterranean stream of travel, the inclines in the Boylston Street side of the Public Garden, at the intersection of Pleasant and Tremont Streets, and the grand terminal in front of the new Union Depot on Causeway Street. The curious structures which serve as staircase coverings to the stations are the subject of much humorous and adverse comment.

The architect surely did not take his model from the ornate and attractive types at Budapest and Paris. But the Boston structures are certainly classic, as well as useful and durable if not cheerful and handsome, with their stern walls of Deer Island granite, lined with porcelain brick, and conical glass roofs, with patent safety treads on the stairs.



CROSS SECTION OF THE SUBWAY UNDER WASHINGTON STREET.

A great change made by the subway improvement is along Tremont Street Mall. Formerly this had a wide gravel walk bordered by tall elms. The trees, and with them the rows of benches crowded in pleasant weather with loungers, have disappeared. In their place is a broad, level, granolithic promenade, twenty-five feet wide, broken by the half dozen tomb-like erections for entrance and exit to and from the subway. The greatest improvement wrought is the clearing of Tremont Street, from which, with the removal of the car tracks bordering the Common, October 1, has vanished all trace of the former congestion.

THE BARRYS.

BY SHAN BULLOCK.

CHAPTER XII.

WITH her sleeves rolled above her elbows and her skirt bunched below her apron, Nan was kneading dough on the table by the kitchen window. Her mother was upstairs; old John sat basking before the fire and blinking at the pan that hung from the crook. It was falling dusk and in the bad light Nan worked more by touch than sight. The fifth day, she kept thinking, the fifth night; and again, as she gathered the dough into a ball, dusted it with flour, and kneaded it out, the fifth day it is, thought she, the fifth night. She flattened the dough, rounded it, slipped her palms beneath it, carried it across and laid it on the pan; then made up the fire and turned again to the table.

Why had old Hugh come? she asked herself. Whisht! Voices outside in the garden? Whisht! That was her father's laugh. Whisht! That was Mr. Frank's. Ah, dear heaven, how her heart was thumping. How could she face him? Now they were at the door; now they were in the hall. Ah, dear heaven. Quickly Nan faced toward the window, bent her head, and with a knife began scraping together the broken dough.

"Ha, ha!" said John, bustling into the kitchen and filling it in a moment with noise and life. "Here we are again, childer. Walk in, Frank, me son, walk in, an', Hugh or no Hugh, make yourself at home. Here, Nan; look who I've brought ye in place of ould Hugh. Ho, ho!" laughed John. "Look, Nan, ye girl ye."

With her teeth tight in her lip, and her nostrils quivering, Nan turned slowly; saw Frank and dropped her eyes. She was pale as death. She gripped the edge of the table and held it fast. Not a word could she fashion; not a thought had she.

"Good-evening, Nan." Frank stepped toward her with his hand out. "How are you?"

Still Nan clutched the table; still kept her eyes down.

"Surely *you're* not going to forbid me the house, Nan?" said Frank in his airy way. "Come; you'll shake hands with an old friend?"

"Come, Nan," shouted John. "Why, confound it all, girl, what's up wi' ye?"

Nan gave her hand; Frank took it, then, without a word, walked to the window.

"Ah," said he; "I thought something was wrong. Look, Nan." He showed his hand all white with flour; "you've left your mark upon me now with a vengeance."

"Aw," said Nan, and at the word the blood came surging mercifully to her cheeks; "aw, now!" She ventured a look at Frank. John guffawed and smote his leg. A smile crept along Nan's face. "Aw, now," said she, "the fool I was."

"Well, make amends, then," said Frank, still standing with his hand spread before her.

"How?" Nan blushed, looked up.

"You might wipe it for me," said Frank; and in a burst of laughter all the load of dread and hopelessness gathered through those four days of spring went tumbling from Nan's heart. Come at last!

John and Frank sat down by the fire and began to talk. Nan lighted the lamp and went upstairs; presently came back in Sunday frock and clean apron, and her mother with her.

"Ho, ho!" cried John, turning on his stool; "so here ye both are. See who I've brought ye, Sarah, instead of ould Hugh. An' was Nan tellin' ye about the handshake she gave him? Haw, haw!"

Sarah nodded.

"Good-evenin', Mr. Barry."

Frank bobbed his head.

"Good-evening to you, Mrs. Butler."

Nan sat down between Frank and John. Her face was radiant. Sarah took a stool between Frank and old John. Her eyes were shining; her face set and hard. John lit his pipe, rubbed his hands together; for the benefit of Nan and Sarah, began telling of his interview with old Hugh. His voice rolled round the room; his hands darted here and there; hardly a word of his own or of Hugh's did he leave unsaid. A smile on his face, and his legs stretched over the hearthstone, Frank sat smoking, thinking, observing. Nan listened in wonderment, almost in dismay. Sarah, bolt upright on her stool, sat taking in John's words as though they were the very breath of life.

"So that's what he came for?" said Sarah at last, looking first at John and then at Frank. "That's what he came for!"

"There's the whole story," said John; "word for word as I tell it to ye. An' best of all, childer," John slapped his knee, "as Hugh steps out of the cot down steps me darlin' Frank there, jist as if the angels had sent him, an' takes Hugh's place! Haw, haw! Did iver ye hear the like? Haw, haw!"

Frank laughed. Nan sat silent. Sarah looked into the fire.

"So that's what he came for?" said she again. "That was it!"

"An' did mortial man iver come on a foolisher journey?" asked John. "Sure it's dotin' he must be. . . . But I wonder, now, what he'd be meanin' be that last speech of his? 'If be any chance,' says Hugh, 'what you're wishin' an' he's playin' the fool for should come to pass—' an' there he stopped, an' do what I would, not a word more he'd say. Now, I wonder," said John, cocking his wise head at the fire, "what he'd be meanin'? I dunno. Would you be smarter, Mr. Frank?"

"Oh, no, John," answered Frank with a laugh. "I'm just as dull as you are. Could you answer, Nan?"

Nan shook her head; said nothing.

"He meant somethin'," John went on. "He spoke powerful fierce, so he did. What's your opinion, Sarah?"

For a moment Sarah sat rubbing her hands along her knees; then fixed her eyes on the fire and sniffed disdainfully.

"Ah, my opinion'd be worth little," said she, "on anything a cliver man like Mr. Hugh Barry'd be sayin'. But if you'd like to know what's troublin' the wits of an ould fool like Sarah Butler, sure I'd answer ye same as the woman answered when some one axed her age."

"And what did she say, Mrs. Butler?" asked Frank.

"Jist this, Mr. Barry: I guess more'n I know, an' I know more'n I'll say."

"'Twas a clever answer," said Frank.

"'Twas so." Sarah sniffed again. "'Twas so, Mr. Barry."

"Ay," said John. "Sure ould Hugh was right when he allowed that most o' the wits o' the world go to the petticoats—Whisht! Aw, dear heavens, if there isn't some one whistlin' at the ferry. But it's always the same; jist as ye get comfortable in bed somethin' bites ye." And laughing noisily, John went out.

Silence fell upon the kitchen. Sarah got down her knitting. Nan turned the cake on the pan and remade the fire. In a while, said Frank:

"Suppose we keep your father company, Nan? You wouldn't mind, Mrs. Butler?"

"Aw, it's please *yourself*, Mr. Barry, you'll do," answered Sarah; "I'm of no account."

"Come along, then; we'll catch him if we're quick." Frank jumped up, went out through the hall door and without a word Nan took her cap and followed him.

Slowly Frank went down the walk, sniffing at the breeze and gazing at the stars.

"What a night!" said he. "What a freshness! What a glittering roof of the world!"

"Aw, yis, indeed," murmured Nan, looking in her tremulous happiness. "Yis, indeed."

Slowly Frank went down the lane; lingeringly looked here and there across the hedges.

"What a springtime this is!" cried he. "What wonders these last five days have wrought!"

"Aw, yis," murmured Nan, sighing gently through her words. "Aw, yis, indeed."

Slowly, very slowly, Frank passed through the trees; and now halted to admire the shimmering lake, and now stopped to star-gaze between the branches.

"What beauty!" cried he. "What peace!"

"Aw, yis," murmured Nan in her joyousness. "It's wonderful."

Slowly Frank paced the pier; at the end thereof paused to look across the broad waters. "'Ne'er saw I, never felt, a calm so deep,'" quoted he; suddenly looked up. "Why, Nan, my girl, we're late after all. Hark! Why, he's almost at Garvagh. Never mind; let's sit here for a while." And side by side they sat them down on the side of the pier.

"Well, how have you been getting on, Nan?" asked Frank, pushing back his hat and setting his legs swinging.

"Aw, much as usual." Nan fell to picking pebbles off the pier and dropping them on the shore. "Much the same," said she.

"Did you think I was never coming again?"

"Aw, I—I was wonderin'."

"Did you want to see me again, Nan?"

"Aw, I—I did. Sure, we all did."

"You didn't think I was frightened of—well, you know whom?"

"Aw, no."

"Suppose he came upon us now, Nan, as we sit here? Why, there'd be murder under the stars; surely there would."

"Aw!" Nan shivered.

Frank leaned back on an elbow.

"Tell me, Nan. Have you seen Mr. Ted Ross since a few nights ago?"

"No, Mr. Frank; not a sight."

"Indeed? Well, I have—once, twice, thrice. He shadows me, threatens me. He vows he will have my blood; he is a perpetual nuisance."

"Aw!" cried Nan.

"He came to the door," Frank went on, "the same night in which he attacked me here on the quay and invited me to step out and fight him on the lawn. Of course that was out of the question; nor could I oblige him the following morning; nor was I in the humor to soil my hands on his jacket a day or two after when I met him in the fields; nor, indeed, have I felt disposed to accept a couple of ill-spelt challenges he has forwarded me by letter. Still, he is a nuisance, I must say."

"Aw," said Nan again.

"It's hard to know how to deal with such a fellow. Excuse me, Nan, for calling him that, but I can't help it. He is so persistent, absurdly wrong-headed. I tried to reason with him. I asked him to explain himself. I said if I had injured him in any way, or offended him, I was ready to apologize and make amends. No use at all. He *will* have his one idea, will be obdurate. What do you think, Nan, is the absurd idea that's at the root of all these goings on? Just guess."

"Aw, no." Nan shook her head. "Aw, I—I couldn't."

"He says I am making love to you; says I made love to you all that day we were together in the turf bogs; says—nay, will have it, whether I like it or no—that I have forced his place in your affections. Now what do you think of that, Nan Butler?"

Nan did not answer. How could she, and her heart in her throat?

"You don't answer me, Nan?" Frank went on, sitting upright again and turning toward her. "Am I to take it, then, that Mr. Ted Ross, in your opinion, is right?"

"No, no," answered Nan. "Never did I say such a thing."

"Is he right in any way?" Frank persisted, still peering round at her face. "Did I make love to you, for instance, in any form, that day we spent among the heather?"

"No," answered Nan, with a shake of the head. "No, Mr. Frank."

"Did I say a word to you that Mr. Ross himself could object to? Did I, Nan?"

"No," answered Nan again, plucking quickly at her apron. "No, Mr. Frank."

"We simply had a happy day together—a happy, innocent day. You enjoyed talking to me, hearing me talk; I enjoyed talking to you, laughing with you, watching you

at your work; we ate and drank together, were merry and happy. That was it, Nan? That was how we spent our day?"

"It was," said Nan. "That was it."

"And for that I am threatened, insulted; and for that you are—" Frank paused. "But what did he say to you, Nan, that night? Did you quarrel?"

"We did."

"He said to you, Nan, much the same that he said to me? Was very angry; spoke foolishly; went away in wrath? Is that how it was?"

"Somethin' like that."

"So our happy day brought forth just this: unhappiness to you, foolishness to your sweetheart, annoyance to me? Isn't that so?"

Nan did not answer. "Is this, oh, is this what he's come for?" thought she.

"Isn't that so?" repeated Frank.

"Somethin' like that."

Frank lay back on his elbow.

"Well, Nan," said he, "I think my uncle made only one mistake when he came asking your father to forbid me the house. He did not come soon enough. And your father made only one mistake when he welcomed me to Inishrath; simply, in welcoming me at all. Look at what I've done. Separated lovers; set my uncle against your father; made Ted take to folly; made you unhappy." He turned quickly.

"You are unhappy, Nan; aren't you?"

"Aw, 'deed I am," cried Nan; and as she cried a twig broke somewhere among the trees. "'Deed I am very unhappy."

Frank groaned.

"And all through me!" He shot to his feet. "But, Nan, this must stop. I won't have you unhappy. I won't be the means of darkening these glorious spring days for you. It's my fault and I'll bear the cost. I've been a fool and I'll pay the penalty. I'll do anything to set things straight. I'll go to your sweetheart and force him to have sense—I'll make him—I'll fight him," cried Frank, and as he cried something moved among the trees, "if nothing else will satisfy him. I'll do anything. John must forgive him. You, Nan, must forgive him. . . . What! Crying, Nan; crying, my girl?" Frank knelt on the stones and took her by the wrists. "Crying, Nan! Ah, Nan, my girl, don't, don't. You'll break my heart. Don't, Nan! I can't bear it." He let go her wrists, rose, stood looking across the lake for a while; then turned and seated himself once more by Nan's side on the edge of the pier. He must be strong, he said to himself, whatever happened he must be strong.

"Listen to me, Nan. Let me confess myself. I've been a fool; a poor, weak fool. I've allowed myself to slide; have been as limp as straw. I've been untrue to myself; I've been untrue to—to others. . . . Nan, Ted is not quite right; but he's not very wrong. I haven't made love to you. No, I have not; but, ah, how I've wanted to! The first time I saw your face my heart warmed to you; the second time I saw you it beat faster for you; that day among the heather it longed for you. God knows it did," cried Frank Barry.

Nan's tears had dried. Her eyes were shining again; her breath galloping. *God knows it did!*

"Yours is the sweetest face, Nan, I've ever seen. To yourself I say it even now. And in all the world I don't believe there's a better woman, or a sweeter, than you, Nan Butler. I envy those who live under the roof with you; I envy the man to whom you've given your heart—I wish to heaven it were mine. I wish to God I were free to tell you my love."

Nan's cheeks were blazing; in her eyes the love-light shone and glowed. *I wish to heaven it were mine!*

"But I'm cruel and weak. I'm saying what is foolish and vain. Ah me, the irony of life! If only—if only—but what nonsense is this. Nan, forgive me. Don't heed what I've said; don't remember a word. It's all folly; utter folly. I've fought against it—night and day I've fought it and myself. I've tried hard to keep from seeing you. I've tried not to think of you. I've tried to do my duty by you, and myself, and—and others. And always I've been weak. . . . Nan, I came to-night to tell

you what I should have said long ago: that we must see each other no more. We must not; shall not. . . . Ah, Nan, Nan. Ah, but it's hard!"

Frank Barry covered his face with his hands and moaned down at the stones. Nan sat looking along the shore. Her face, now, was set and pale; her hands lay clasped on her lap. *We must not, shall not!*

"Ah, but it's hard," moaned Frank Barry; then raised his face once more. "It's hard; but I'll get over it. In a week or so I'll be back in London, back at my work and my moiling; in a week or so—Yes, I'll get over it. We all do; we all do. Nan," said he turning, "will you ever think of me when I'm far away in grimy old London; ever recall anything I've said to you? Will you, Nan?"

Nan turned slowly and looked at him.

"Think of ye?" said she. "Think of what ye've said? You ask me that! Tell me this, Mr. Barry: Did ye mean what ye said to me, ten minutes ago?"

"Mean it, Nan? I meant every word of it."

"An' ye think a woman can hear such things an' forget them, forget them forever and ever?"

"Ah, I know; I know, Nan. It was foolish of me; mad, cruel. But I couldn't help it. You made me, Nan; you made me. It was your voice, the sight of you, yourself. But you'll forgive me? You'll forget. . . ."

Nan rose quickly.

"Ah, quit," cried she passionately. "Quit, for God's sake!"

Frank sat looking up at her. A while of silence came. The beat of John's oars sounded nearer and nearer.

"I have hurt you, Nan?" asked Frank at last. He sprang to his feet. "What can I do?" cried he, spreading his arms. "Tell me: what am I to do?"

Nan stepped upon the pier. Frank clutched at her arm.

"Tell me, Nan," cried he. "What can I say or do?"

Nan paused, looking down at him.

"Ye need say nothin'," she answered. "An' ye may do nothin'."

"And you forgive me?"

"Aw, forgive," cried Nan. "Forgive!"

She started down the pier. Hastily Frank followed her, his hand out as if to grip her shoulder.

"Nan!" he called softly. "Nan!"

But Nan walked on; presently raised her voice.

"Hello, father," called she. "Is that you, father?"

"Ay, ay," came back. "Is that Nan? Is anything wrong?"

"Aw, no. It's only Mr. Barry an' meself come down to meet ye. Hurry in. Supper's ready."

"An' a good job, too," said John, as the cot swung in by the pier; "for it's meself that wants it. So you've both come down to meet the old man? That's right. God bless ye both, me childer; God bless ye. An' now come away, Frank, for a chat an' a smoke, an' a drop o' the crature, ye dog ye! Come away, now, yourself an' Nan."

So, Nan this side, Frank that, and John holding forth in the middle, the three left the pier; went up the lane, across the yard and into the kitchen: and there in front of the fire sat old John, Sarah, and Ted Ross.

CHAPTER XIII.

AT sight of Ted sitting there on the hearthstone, Nan drew a swift breath and clutched at the side of the dresser; Frank buttoned his jacket and leaned against the wall; John walked a step or two across the floor, stopped and stood staring at Ted's back. Sarah turned and looked at the three; wiped her lips with her hand and again faced the fire. "Ay, ay," croaked old John. "Och, ay, ay." Ted himself, elbows on knees and his hands clasped, sat crouched upon his stool: not a word said he, not a hair's width did he move, the while John and the rest stood eying him. While you might count twenty dead silence held the room; then a coal fell, Sarah coughed and John took a stride forward.

"Well, I'm foriver danged!" said he; and stopped again. Nan moved from the dresser. Frank Barry crossed his legs and leaned an elbow against the door. Sarah,

at sound of John's voice, looked round. "Hish," said she. Still Ted Ross sat dumb and motionless.

"Well, I'm foriver danged," cried John again, "if this isn't the biggest piece of impidence.—Here," he shouted, and made across the floor; "let me get at the scruff o' your neck." And with the word Ted shot to his feet and turned his back to the fire.

"Good-evenin', Mr. Butler," said he.

With an oath John made for him. Nimbly Ted sprang one side and let John go sprawling across a stool, heels in the air, his hands on the hearthstone. Sarah clutched John's coat. "Let the boy alone," she cried. "Hear what he's got to say." Nan ran across the floor. "Father!" she pleaded. "Aw, father!" John scrambled to his feet.

"Let me go, Sarah," he spluttered. "Let me at the pup." He broke from Sarah's grip. "Out o' the way, Nan; out o' the way, girl!"

Nan put her hands against John's breast.

"No, father," said she; "no. Stand back."

"I'll break his neck," shouted John. "I'll pulp ivery bone in him."

"You'll do what I tell ye," said Nan. Steadily she pushed John back. "No; further—further. That'll do. An' now," said she, turning toward Ted, "now maybe you'll be sayin' something."

"He'll say nothin'," shouted John, from the middle of the floor; "he'll say nothin' in this house. I won't hear him. He's a reprobate. I'll not be quiet. He insulted me; he insulted me friends—"

"Ach, let the boy speak," Sarah broke in. "It's his due. He's been wronged. Let him speak, John, I tell ye."

"No," roared John; and with that Frank Barry took a step from the wall.

"If my word has any weight with you, John," said he, "I advise you to do what Mrs. Butler says. And if I'm in the way at all," added Frank with a wave of his hand, "please say the word and out I go."

"Eh? You, too, Frank!" John looked round in amaze. "Let your tongue be short and quick then," he shouted at Ted; "an' mind your manners, I advise ye. An' stay where ye are, Frank Barry; stay where ye are, me son."

Ted had been standing with his back to the wall, eyes fixed on Nan's face, his arms folded across his breast; now he dropped his hands, stood erect, stepped from the wall.

"I'm obliged to ye, Mr. Butler," said he; "an' I'm obliged to the rest o' ye for what—"

"Take off your cap, sir," called John; "an' less o' your obligements."

"I'm thankful to ye again, Mr. Butler," answered Ted, pulling off his cap; "an' for the sight o' your good example."

"Niver heed me." John pulled off his hat and flung it in the corner. "Jist less o' your impidence, mister, an' more o' your news. Come, sir."

Nan crossed and leaned against the dresser. Sarah pulled over her stool to old John's chair, coughed behind her hand, and sat down. John folded his arms; with watchful eyes stood glowering at Ted from the middle of the floor. By the door stood Frank, an amused spectator of this rustic melodrama, which, with true Irish spontaneity, had set itself playing by the Butlers' hearthstone.

Ted Ross eyed John for a moment; then plucked at his collar and took another step from the wall.

"Very good." His voice came clear and quick. "I'll keep me impidence to meself, an' say me say. John Butler, it's a good many years now since I first sat before your fire; an' it's a good while since the day your daughter Nan there an' meself began our courtin'. I needn't be tellin' ye—"

"Ye needn't," said John. "We all know Queen Anne's dead. Come to the point, sir."

"Ay." Ted paused and looked John hard in the face. "Well, I'll take your good example again, John Butler; an' I'll spare me words. I'll let the ould days go, an' I'll come to the first night o' the spring weather. On that night, John Butler, yourself an' me were sittin' below on the quay there—"

"I know all about that night," said John. "'Twas the same night, Ted Ross, that ye showed yourself a ruffian, an' a coward, an' a reprobate. Take me advice, young man, an' come on another day or two."

Ted came forward, hands clenched, his face blazing.

"I'm no reprobate," he cried. "I'm no coward. I did nothin' that night I was ashamed of. I did nothin' I wouldn't do again."

"Quiet, sir," came John's hollow roar. "Keep quiet."

"I'll not keep quiet," Ted went on. "I'll say me say now if it costs me broken bones. John Butler, you're unjust; you're deluded. Heavenly hour, man, what's come over ye? What, in God's name, have I done to *you*, John Butler?"

For a breath or two, John stood glowering at Ted.

"Done? What have ye done? D'ye see that man there?" shouted John, and pointed at Frank.

"Aw, I know, I know," Ted broke in impatiently. "I know what I did to him; but what did I do to you, John Butler, that ye should treat me like any tinker's brat? Man, ha' ye no heart? Man, d'ye not mind the ould days? Man, suppose ye were my age, an' another went carryin' off your sweetheart? Suppose he did, what would ye do?" cried Ted passionately.

John drew back.

"Eh?" said he. "What—what's that?"

"Would ye stand by," Ted went on, "an' let him take her without raisin' a hand? Would ye let the heart go from ye without a murmur? Would ye turn on your heel, an' light your pipe, an' say: 'Divil cares, an' divil take them'? Would ye, John Butler? Not you; ah, not you! An' yet ye call me a coward an' a reprobate?"

John had been standing with bent head, looking at the tiles and rubbing his chin with his thumb; now he raised his eyes and turned to Sarah.

"What's this, Sarah?" said he. "Why didn't ye tell me?"

"Ah, quit, ye fool ye," snapped Sarah. "Quit your blather."

"I know iverything's against me," Ted continued. "I'm no gentleman; an' I'm no scholar; an' I'm dull i' the wits, an' dull o' the tongue; an' me hands aren't white, an' me clothes aren't broadcloth. I know all that. It's only natural, I suppose," said Ted, glancing at Nan as she stood, pale and stricken, leaning against the dresser; "it's only natural that the beggar gets kicked from the door. . . ."

"I niver dreamt o' such a thing," John muttered to himself. "God knows I didn't. Nan," he said, "is this true?"

Nan did not answer. Ted broke into a cheerless laugh.

"Well," said he, looking at Sarah, "this is a fine piece o' play-actin', I must say! Why, next thing," said Ted, with a jerk of his thumb, "we'll have the gentleman be the door sayin' he knows nothin' either."

"This is what brought ould Hugh these parts," John kept on, mumbling slowly to himself. "This is what he meant be all that palaver. I wonder, Sarah, ye wouldn't give me a hint, even?"

"Aw, yis." Sarah's knowing eyes twinkled. "Aw, yis, indeed!"

"But enough o' this," said Ted, with a pluck at his waistcoat. "I didn't come here to-night to talk blather, nor to hear it. No. 'Twas to have a word wi' you, Mr. Frank Barry," said Ted, turning sharply and flinging out an arm; "jist to have a quiet five minutes wi' ye here, man to man an' face to face."

"I don't think you need trouble yourself, Mr. Ross," said Frank from the door. "You can say nothing—"

"Can't I?" Ted interrupted. "Well, wait an' see, Mr. Barry." Suddenly he pointed at Frank. "Look, John Butler, at the man you'd have steppin' into me shoes. Look at him, I say. There's a bully boy—a tight chap—aw, a brave, roarin' blade! He's no reprobate, John Butler; he's no coward. Coward!" shouted Ted, flinging round on his heel. "Be the king, if there's a bigger from Cork to Derry I'm ashamed o' me breed."

Frank crossed the floor and sat himself by Nan on the shelf of the dresser.

"This is all very pretty, Nan, isn't it?" said he with a smile. "I'm sure, like myself, you must be enjoying the thing immensely?"

Nan moved away a step; kept silent. John leaned his back against the passage door and stood staring, now at Frank, now at Nan, now, with a dubious wag of the head, at Ted and Sarah. With the wondering eyes of a child, old John sat gripping his pipe and gazing blankly across Sarah's head at something or other—something, he knew not what. Ted scowled at Frank; then spread his legs, caught his thumbs in the armholes of his waistcoat, in as level a voice as he could command, went on.

"Ay," said he, "it's all very pretty. It's powerful fine sport to do your worst wi' other people's affairs an' then to sit laughin' at the fun you've made. I'm only a country-bred lout. If ye want sport, an' there's only me in the way, sure you've only to sniff at me an' down I go. Who the blazes are you, sir?" shouted Ted, all suddenly. "What, in glory's name, is there in the face o' ye, or the breed o' ye, or the body o' ye, that's worth the snap of a rotten carrot? Ye pup! Ye coward! Ye sneakin' whelp!"

Sarah rose quickly. John came hurrying across the floor. Nan moved toward Ted. Frank folded his arms, crossed his legs, nodded at John.

"Never mind, John," said he. "There's no need for fear. I'm only hearing what I've heard often enough these last few days."

"Aw, but this is infernal!" roared John.

"Stand back, Butler," cried Ted. "Ye needn't be afeerd. I'm not goin' to lay a hand on his miserable hide."

John stood back. Sarah sat down. Nan, pale and stricken, leaned on a chair, a pace or two from the dresser. Again Ted faced Frank; again let his voice sink to a tone of every-day contempt.

"We're not well used to your sort, these parts, Mr. Frank Barry," said Ted, pacing this way and that before the dresser. "I'm thinkin' I niver met your kind before; the Lord grant I may niver clap eyes on your breed again."

"Thank you," said Frank with a nod. "Your wish is mine."

"Aw, spare your thanks, Mr. Barry; keep them for the man that'll hang ye. But, in these parts, I'm wishful to tell ye, when a fellow wants another man's sweetheart he goes like a man an' takes his chance. He steps out; says his say; fights his fight, if it's wanted of him; takes what he gets; shakes hands—an' there's the end for ye. That'll not be the way you like to do things, Mr. Barry. You come like a fox after a henroost, steppin' on your toes in the dark. You step into a kitchen, sit ye down, an' begin listenin' to what sweethearts are sayin'. You come talkin' to a poor girl, in your fine clothes an' boots; an' ye fire out your beautiful speeches; an' ye make yourself agreeable to the mother—"

"Aw, yis," said Sarah with a snigger. "Aw, yis, indeed!"

"— An' ye make sport o' the man that's away at his honest work; an' ye pour your poison into the poor girl's ear—Ah yes, I know ye, Mr. Frank Barry; I know ye!"

"You see, Nan?" said Frank. "He will have it so."

Nan did not answer; and Ted went on.

"Then, one day, off ye go wi' the poor girl an' stay wi' her from mornin' to night; an' home ye come singin' an' laughin'—Ah, confound ye, what did ye say to her that day? Blast ye! what did ye say to change her like that? What did ye say to set her watchin' for ye from the window, an' callin' for ye."

"Aw!" cried Nan at that. "Aw!"

Frank looked at Nan and his face fell grave. John and Sarah stood close together, their faces tense and shining. Old John, still clutching his pipe, had fallen asleep. The fire flapped; the kettle sang on the crook.

"Why didn't I choke ye that night on the quay?" cried Ted, in a quick flare of wrath. "Why didn't I catch ye be the collar at Ryfield door an' trounce ye on the lawn? Ye wouldn't fight. No. Ye knew better. Ye coward! You'd talk an' talk; but ye wouldn't stand up to me an' fight it out, man to man. If you'd beaten me I'd

—No, danged if I would. I'd ha' fought ye for her so long as there was a whole bone in me. I would; an' I will. She's mine yet, Frank Barry, for all your divil's devices; an' mine she'll be in spite o' ye. —An' now I'll finish."

Ted turned toward John and Sarah.

"John Butler," said he, "you've heard me; an' I thank ye. I didn't mean to come trespassin' on your floor the night; but chance sent me. I was in the wood below when ye went off in the cot. That was chance, too. Ye were hardly gone when the gentleman at me back, an'—an' some one else came down the lane. That was more chance. I didn't want to listen; but I heard a word or two. I did, John. He made her cry, John. He said he'd fight me, John."

Frank stepped from his place beside the dresser.

"Just a moment," said he. "But this comedy has gone quite far enough. You're making your own grievances, Mr. Ross. You're talking nonsense—"

"Am I?" interrupted Ted. "That's your opinion, Barry."

"I will speak," said Frank. "You're talking nonsense, I say. You're making ridiculous assumptions. You're insulting me—"

"I'm proud to hear it, Barry."

"I demand a hearing. John, I appeal to you."

"You'll hold your whisht, John Butler. I've got the floor an' I'll keep it."

"Nan," said Frank, "I appeal to you."

"An' so do I," shouted Ted; "so do I. Nan Butler, make your choice—now, this mortial minute. You've heard me; ye know me; ye see Barry an' ye know him. Think of the ould days; think of all you've said; think of your promises; look at me, an' look at him, an' choose between us. Choose, I say, Nan Butler."

Frank tried to speak; Ted stopped him with an oath. As pale as death, Nan stood looking at the floor, with the eyes of every one hard upon her.

"Choose!" cried Ted again. "Think of the ould days—an' choose."

Hardly breathing, Nan stood before them all, her head bent, her hands hanging limp; stood stricken before them all, with loyalty beckoning her this way and love pulling her that.

"Choose!" cried Ted. "It's between a man an' a coward, Nan. Think of the ould days—an' choose."

Nan drew a breath; raised her eyes and looked first at Ted and then at Frank. And at sight of Frank's face the blood surged to her cheeks, the love-light flashed in her eyes; and she stepped to Frank's side.

Then dead silence. Like things of wood, John and Sarah stood staring at Nan. With his head thrust forward, hands clenched, face haggard and brimming with fury, Ted Ross stood solitary out on the floor. Then Sarah sniffed; John whistled softly; Frank took Nan by the arm; and like a flash Ted sprang forward.

"Oh, confound ye!" he shouted, "what have ye done to make her like this?" He took Frank by the throat and bore him back against the dresser. "Confound ye!" he shouted; "what have ye done to her?"

There was a mighty scurry. From the dresser plates came crashing down. Nan strove to loosen Ted's grip. Sarah screamed and flung her apron over her head. Old John woke up crying, "What! what!" John shouted and hurried to the rescue. Round the two swung across the floor. Over went the chairs, the stools, the pots and cans. Frank struck Ted in the face. Ted skirled, tightened his grip, and whirled Frank against the table. "Aw, shame, shame!" shouted John. "Aw, wirra, wirra!" moaned Sarah beneath her apron. "What's this? What's this?" shrilled old John from his chair. Here and there the two swung; crashed against the door, went thud against the wall, wrought havoc once more upon the dresser; whirled back to the middle of the floor, and there came down, Frank beneath, Ted, skirling like a very demon, above. "Now I've got ye," shouted Ted. "Now, confound ye, I've got ye!"

He raised his arm, but Nan caught it. Then over rushed John; and out went Ted, fighting and sprawling, into the yard.

CHAPTER XIV.

"SHE chose me; she loves me," murmured Frank Barry, as with head down and feet wandering among the stones, slowly he passed along the road up from Garvagh ferry. "She chose me, chose me; she loves me, loves me. What of bruises and aching bones, what of all the world? Nan chose me; Nan loves me."

That Nan should have chosen him! To see her step to his side; to see her face, her eyes! Never could he forget that look, never. It was wonderful. Worth the years of a life it was, that one great moment.

And Marian? She whom he had vowed to love forevermore; Marian who, like Nan, had chosen him and loved him also?

What to do? He was distracted, perplexed. He loved his Marian; he loved his Nan: in heaven's name, which? Ah, Nan's face was sweet; she herself was sweet; fate and world he could defy with Nan at his side. But Marian?

He must be faithful; would be faithful. He must crush his heart; cure himself of this folly. Nan was another's; Marian was his; so it must be despite of all.

But Nan; what of Nan who had chosen him? He was distracted; aching from head to foot, bruised in body and soul.

The coward he had been. To tell her all there by the shore; to wake her love; to let her choose him; to leave her calling good-by from Inishrath pier, leave her with hope and longings that might never be satisfied! 'Twas cowardly; aching bones and a distracted breast were not half his due. But, in heaven's name, how keep from telling her? He had gone to say good-by; 'twas the last time; she was so sweet; his heart overflowed; he had to tell her.

Why had he gone? He knew he was foolish—and went. He meant to say nothing—and spoke. Fool that he was.

Should he throw, even now, his vows to the winds, and take Nan for his own? Marian would soon forget. No; no! What devil was tempting him? Marian was his; Nan was another's; so it must be; by heaven, should be!

Yet, what to do? thought Frank Barry, and pausing in Ryfield lane looked up at the stars—the solemn stars set in that eternal sky whence cometh man's strength. How leave Nan? How face Marian? It would be brutal to slink away, to go flying to Marian, not leaving a word of comfort, of explanation with Nan. Yet, he must not see her again. He dared not. He must be brutal; must slink away. Ah, but the ways of life oftimes lead poor mortals into stony places. Never to see sweet Nan again! It was bitter cruel. And she would pine and fret; watch for him and wait; would cry for him in her heart; and cry in vain.

Bah! What folly was this, what weakness! Let him crush himself as with an iron heel. Nan would soon forget. Her swain would hear of his going and fly with the news, would come to his knees and beg forgiveness; then, heigh-ho for a mud-house and love and a crust. These affairs were soon born, sooner forgotten. 'Twas the way of the world. The eternal stars were weary of beholding such ironies and comedies of life. Nan would forget. But he, never could he forget. Never could he behold those stars, thought Frank Barry—and with his hand on the latch paused at the kitchen doorstep—without thinking of the times, the happy times, he had walked by her side and talked sweet things beneath their splendor. She might forget; he never could: and out went the eternal stars with a push of the kitchen door.

Sally had gone to bed. A lamp glimmered on the wall. Frank kicked off his boots, put on his slippers, and went up to the parlor. The room was full of light; supper was spread; before the fire his uncle sat reading a newspaper. An open Bible lay on the table, and beside it a letter.

"For me?" asked Frank.

Hugh did not answer.

Frank took up the letter. Happy omen: it was from Marian. He sat down; at once was deep in the record of his Marian's thoughts, hopes, protestations, fears. The dear girl! Soon he should see her; soon hold her in his arms. His eyes glistened: smiles wreathed his face; visions shaped themselves in the coals.

Presently Frank sat forward, stirred the fire, lit his pipe, and turned to old Hugh.

"Well, uncle," said he. "And how goes it?"

Hugh dropped his paper; looked at Frank over his spectacles.

"Oh, it's you, is it?" said he. "You've been there some time I'm guessin'?"

"Yes, uncle."

"Ay." Hugh raised his paper. "Just so. An' ye said good-evenin', I believe, when ye came?"

Frank turned quickly.

"Really, uncle, I beg your pardon. Excuse my bad manners, but I was preoccupied."

"Ay," returned Hugh, in his driest manner. "I know." He ran his eye down a column or two; noisily turned a sheet. "Ye did what ye intended to do, this evenin', I suppose?" he asked.

"What was that, uncle? Really I forget."

"Made a fool o' yourself."

Frank lay back in his chair; smiled, whiffed steadily at his pipe; leaned forward again, with his arms resting on his knees.

"Yes," said he, as if to himself. "I suppose I did make a fool of myself this evening."

"H'm!" grunted Hugh behind his paper. He read a sentence or two; grunted again; suddenly threw his paper on the floor, pulled off his spectacles and laid them on the table. "An' when is the great event comin' off?" asked he.

Frank looked around.

"What d'you mean, uncle? What event?"

"Your marriage with Butler's daughter."

Frank laughed.

"Oh, I see. Well that, I fear, must be looked for in the very dim future."

"Indeed! I suppose it's all settled, though," Hugh kept on, in that crisp, matter-of-fact way of his; "all, we'll say, but the date?"

Again Frank laughed.

"No, uncle. Nothing's settled, date or else. You needn't be fearing—"

"I wasn't fearin'. Maybe I was hopin'?"

"Hoping, uncle?" Frank stared. "Hoping?"

"Ay. That was the word." Hugh settled himself in his chair. "I was in Inishrath, on business, this evenin'," he went on; "an' I saw the girl. I spoke to her, an' questioned her. Well," said Hugh, with a wave of his hand, "there's worse to be seen; lots worse."

Frank kept silent. Hugh knitted his brow; blinked at the fire; went on:

"I've been turnin' things over since I came back; and it comes to me that maybe, after all, you're not such a fool as ye look. No. The land's gone to the dogs, it's true; but, with advice, a smart man might save it yet. Many a young fellow has started wi' worse. Yes. The house is a good one; there's outhouses of a kind; an' there's as much manure in the yard as'd make the island a cabbage garden. Then there's the ferry; with management, that might be a good property too. It'd take time, an' work, an' brains; but they're common things in the world, ay, common enough."

Hugh paused. Frank shifted in his seat; still kept his eyes on his uncle's face.

"So I've been thinkin' that maybe ye might do worse, Frank Barry, than take Butler's daughter and settle yourself on Inishrath. She'd make ye a good enough wife, I'm thinkin'; an' she might make a man o' ye. A while at the tail of a plow, or drivin' a spade, an' an odd pull in the cot to the ferryin' 'd soon take the hump off ye, an' put a trifle o' color in your face. Yes. You'd soon get an appetite over there; it isn't for long you'd turn up your nose at potatoes an' salt in those parts; wet feet wouldn't trouble ye a power, nor a trifle o' rain, nor a whiff o' wind from the mountain. No. It'd make a man o' ye. It'd do more for ye in a year than London'd do in five. You'd be healthier, an' happier, an' better to look at an' talk to. To be sure, there's the mother, an' father, an' the grandfather, but, bless ye, there's worse things in life than vixens and blatherskites; an' God in his mercy doesn't let people live always. No. Ye might do worse, Frank Barry; ye might do worse. I'd give ye my advice; I'd advance ye a trifle; I'd think o' ye in other ways. Ay, ye might do worse."

Frank laughed out.

"Good," said he. "Good for you, Uncle Hugh. By Jove, it's excellent!"

Hugh turned in his chair and looked Frank up and down.

"Ay? Excellent—*By Jove!* What d'ye mean, sir?" asked Hugh sharply, with a slap on the arm of his chair.

The laughter withered in Frank's eyes.

"Surely, uncle, you were only joking?"

"Jokin,' sir? Jokin'! Tell me, did ever ye know me to joke, as ye call it?"

"No. I can't say I have, uncle."

"Then keep your accusations, sir," growled Hugh. "Keep them for your own kind. This is your thanks for my troublin' to think about ye! This is your gratitude for showin' ye how to make a man o' yourself!"

"Look here, uncle," said Frank, leaning forward, "I don't want to argue the point, but is it not a fact that you asked John Butler not six hours ago to shut his door against me?"

"What if I did?"

"Yet you talk as you've just done!"

"Can't I change me mind?"

"Of course. Still, you've changed it pretty completely, and pretty suddenly, I must say."

"Am I to be blamed," Hugh kept on, "because I try to keep a fool from the ditch? Am I to be blamed for changin' me mind when there's nothin' else to be done; when I see everythin' settled before me face?"

"You see nothing settled," interrupted Frank warmly. "You've no right to make assumptions or to say what you've said. It's unjust; it's unkind."

"Unjust? Who's unjust? What assumptions have I made?"

"You've assumed that I am making love to Nan Butler; that I wished to make her my wife."

"Well?" Hugh stamped his foot.

"I say you have no grounds for such assumptions."

"No grounds; no grounds! Great powers, sir, d'ye think me a fool? D'ye think I haven't eyes, haven't ears? What have ye been doin' night after night, in Inishrath these weeks and weeks? What have ye been goin' about wi' the girl for? What made Ted Ross come here twice to make ye fight him? No grounds! Tell me, sir, have you no regards for that girl?"

"I had—I have the greatest regard for her."

"Haven't ye let her know your regard?"

"No. Not till—not till to-night."

"Doesn't she care for ye? Answer, sir."

"I give you my word, Uncle Hugh, that till to-night I didn't know her feelings toward me."

"Your word! Answer me, sir, didn't she throw Ted Ross over for ye?"

"It seems so, but I didn't know. I give you my word, Uncle Hugh, that when to-night she—she—"

"Ah, your word again! An' your shufflin' and stammerin'! A pretty fool ye must think I am. A mighty fine impidence ye have, sir, to sit there talkin' your foolery to me. I'm unjust, indeed! I'm makin' assumptions, indeed! Ye tell me that, sir! Phat!" cried Hugh, swinging round in his chair. "I'm weary of ye."

Frank made as if to answer; instead he dropped his arms across his knees and leaned toward the fire.

"There's no use in talking," said he.

"Not a bit," cried Hugh.

"Not a bit," echoed Frank, "not one scrap. I can only say just this, uncle, and you may believe me or not as it seems fit to you: I have not made love to Nan Butler; I never meant to; I had no notion of offering her marriage, and I have not."

"I know," said Hugh with a nod. "I know."

"What has occurred has not been through my seeking," Frank went on. "I have been to blame, I admit. I should have kept from Inishrath; I should not have given Nan Butler the chance to—to fall in love with me. I have been a fool, as you put it. Still, Nan Butler is a worthy girl; she has a sweet nature; I found it hard to keep from seeing her. I fought myself, but sometimes my weakness and my foolishness got the better of me."

"I know," said Hugh, in his grim way. "I know."

"I admit fully that I have been indiscreet. I take all the blame. Believe me, uncle, I am not sitting here unpunished. No matter about that. I say only this, and only to you, uncle, I should be a proud man to-night were I free to love Nan Butler and be loved by her."

"I know," said Hugh again. "I know."

"However, I am not free. I have weaknesses, but, thank heaven, I have not been faithless to—to Marian."

"That's the London lassie?" asked Hush.

"Yes."

"An' it's her you mean to marry?"

"Please God."

"I see," said Hugh with a bob of his head. "Well, go on."

Frank leaned back.

"That's all, uncle, I think. I'm sorry I can't fall in with your scheme for making a man of me. But you see—" Frank shrugged his shoulders.

"I do. I see right well. So it's the London lassie will have ye on her hands after all? Just so. An' only for her, I suppose," asked Hugh, "it's Nan Butler would ha' got ye?"

"If you like to put it that way, Uncle Hugh."

"An' only for—only—say, because you're not a Mormon, or King Solomon," Hugh went on, with a corner of his eye on Frank, "who knows but ye might ha' had both o' them."

Frank laughed, lifted the poker and stirred the fire.

"Who knows, indeed," he said.

"Ay." Hugh paused. "Well, I'm wiser now than I was an hour ago, a good deal wiser." Hugh paused again. "So that's the end o' your galavantin'? You've fooled a girl an' made a fool o' yourself—an' there ye are."

"I haven't fooled her," cried Frank. "It's cruel to say so."

"Is it? Well, well. For all that it'll please me if the word stands. Not that I pity her; not one bit. I think she's about as lucky a girl as there's to be found within twenty miles o' Ryfield gate-post this night."

"You mean—"

"I mean that she missed you, Frank Barry."

The two looked at each other; then Frank dropped his eyes.

"Ah, yes," said he. "It's easy to be bitter—and unjust."

"Is it?" answered Hugh. "Ye mean I'm too truthful. Well, here's another mouthful o' bitterness for ye: the woman I pity is the woman that gets ye."

"Thanks," said Frank.

"Ye can keep them," said Hugh. "I wouldn't for twenty pounds," he kept on, "Nan Butler had the burden o' ye. She's worth ten o' ye. You'd break her heart inside a year. The first face that wasn't as ugly as Satan's 'd bring ye flyin' after it like a moth round a candle. A moth? Sure it's insultin' the moth. You've a backbone o' straw, Frank Barry; you're unstable as water; your father was like ye, but he was a giant beside ye. A man! A man that's engaged to be married, that means to be married, to keep runnin' night an' day after a girl he only wants to play with an' drop when he's tired—"

Frank sprang to his feet.

"Enough of this," he cried. "I've been insulted often and long enough. It's intolerable. In heaven's name," he cried, "what would you have me do? Why do you turn the tables on me like this? Would you have me be faithless to Marian?"

"I'd have ye do nothin'," answered Hugh. "I'd have ye do just what ye meant to do, or just what ye think you'll do; nothin' more or less."

"Answer me, Uncle Hugh," cried Frank again. "Would you have me faithless to Marian?"

"I'd have ye do nothin', I say," Hugh repeated. "But if ye ask me what I think ye might ha' done, I'll answer ye."

"What?" said Frank.

"Kept your charms for the London women—an' fooled *them*."

Frank turned on his heel and strode across the room.

"Oh, I'm sick of it!" He wheeled and flung out his arms. "Before God," he cried, "I don't believe there's a more cruelly treated man in the world this night. I've been threatened, insulted, beaten, misunderstood; I've been called a fool and a knave; I've acted innocently and been taken by the throat; I've done my best and been set in the wrong. I'm sick of it. And now, you," he pointed at his uncle, "you turn upon me and give me of your sarcasm and bitterness! You would *not* hear me; would *not* understand. Bah! These yokels —their feet of clay and hands of mud. Thank God, I'm quit of them," cried Frank, flinging across the floor. "Thank God, the days of my fooling are over. I wish I were gone. I wish to heaven I had never come."

Hugh rose; turned his back on the fire and spread his legs.

"That's better," said he; "that's the way to talk. Dang me, Frank, if there isn't something o' the man in ye after all. Ay."

"Oh, man be hanged!" cried Frank. "I'm as good a man as you."

"You'll be a better when I'm dead," was Hugh's answer. "Yes. Well; it's late an' I must be movin'. When did ye say ye were goin', Frank?"

"The sooner the better."

"The morrow, maybe?"

"Yes; to-morrow."

"Ay. Well, we'll be sorry to lose ye."

"Oh, spare me that."

Hugh moved from the hearth.

"All right, me son; all right. Well; I'll see about gettin' ye off the morrow. I will. Sometime after dinner'll do, I suppose?"

"Yes."

"Right. Good-night to ye."

Hugh stepped for the door. Frank watched him a moment; then strode and clutched his arm.

"Look here, uncle," said he. "You've been hard on me—dreadfully hard. I'm not so bad as you make out. Come; we mustn't part like this."

Hugh turned, laid his hand on Frank's shoulder.

"It's all right, me son," said he. "I forgive ye a lot for that bit o' temper ye showed. I liked that. Show more of it, an' think less o' yourself, an' stiffen your back. That's all ye want—that an' a trifle less taste for the petticoats. To be sure. An' for me: well, I'm an ould man, an' like to talk; but, God bless ye, there's no teeth behind me bark. Not a tooth. I mean well, sometimes; and sure if I didn't mean well to you I'd be a hopeless ould ragamuffin." He put out his hand. "Lay it there, me boy. Good-night, an' God bless ye."

Frank gripped Hugh's hand.

"Good-night, uncle. And God bless you."

"Ay. I hope he will," said Hugh from the door; "I hope he will. If he does I'll get more than I deserve. Good-night, me son."

CHAPTER XV.

So Frank packed his bag; bade the tearful Sally good-by; and across the fields set out with old Hugh toward the shore. The day was beautiful; spring sang in every hedge and shouted on all the hills; the sky shone gloriously; the fields lay throbbing with life; fair and smiling, old Ireland held revel beneath the sun.

Hugh was in good humor. The long days were here; the land was warming; work was in swing; at last the sun had come to scatter his bounty, to speed the plow, bless the spade, bid the earth yield of her increase. He was sorry Frank was going: still it was all for the best, and work left no man freedom to grieve. The youngster was going; let him go. Ireland was no place for him, its people no companions. He was soft, easily led; he was a citizen, a bookworm, a man in petticoats: let him go. 'Twas best, thought Hugh, and looked at Frank, as head on breast and feet trailing the grass, silently he walked along. In a day or two he would forget his foolishness, would have other things to think about; in a day or two the old parlor at Ryfield would be just as it used to be. In a day or two? No. Con-

found it, he would miss the lad; would miss his face and his jabber; would miss worrying about him and arguing with him. Ay; he knew it well.

But what nonsense was this? thought Hugh. Beginning to dote, he was. He turned and smote Frank on the back.

"Come," said he; "have ye nothin' to say to me, Frank? What's ailin' ye, me son?"

Frank looked up.

"Oh, nothing much, uncle." Frank smiled. "I'm—well, you see, I'm a little emotional by nature, and partings are trying sometimes. I've been here a good while—and I've had a good time—and you've been very kind to me—and, to tell the truth, Uncle Hugh, I'm not glad I'm going."

Hugh walked on. This kind of talk would never do.

"Pooh, pooh," he said. "Rubbish, Frank, rubbish. Man, we're not children."

"No, uncle. Still, I keep to what I said. Even the fields," said Frank, stopping to look about him, "and the hedges, and the mountain over there, seem like old friends that I don't want to leave. They have taken hold of me. Think of it, uncle. I'm going now, and I may never see them again —never."

"Is it the fields?" asked Hugh. "Well, hang me, if I'd let that trouble me. Taken hold of ye, indeed! Ay, an' often wet your feet. Come on, sir, an' quit your blather," cried Hugh; then, as if fearing lest Frank, at the last moment, should repent of his going, hurried on, wound up the hills and through the rushes; descended at last and came to the shore, and to James the herd sitting by it in his little cot.

Frank's bag lay on the crutches; away across the lake a horse and car stood waiting. So this was the end, thought Frank, the very end. A minute he stood looking at the stones; then, a dry lump in his throat and tears in his eyes, wheeled round and shot out his hand.

"Good-by, Uncle Hugh. And thank you—thank you for all your kindness."

"Blather, Frank." Hugh's grip closed hard and tight. "Nonsense, man. Thank your stars when they send ye to Parliament. Good-by, Frank; safe home, an' God keep ye. Now, in ye go; an' hurry across, James, hurry across."

Frank stumbled into the cot and sat down. James pushed off. A wave of the hand, a shout from the shore; and 'twas good-by Garvagh.

James bent to his oars and fell to talking. 'Twas the great spring weather, so it was; 'twas grand to feel the sun warming the old bones in one. And, sure, 'twas a thousand pities Mr. Frank was going so soon. All the tail of the winter he had had; now, when things were brighter, off he had to go. Still, maybe it couldn't be helped; 'deed no. An', sure, Mr. Frank was going away looking in the best of health, thank God. Five times a better looking man he was that mortal day than the first time James had seen him. "Ye mind that day, Mr. Frank?" asked James. "Man, but I was glad to see ye."

"Ah, yes, James," answered Frank, sitting there by his bag, cheek in hand. "Too well I remember it."

"An' now you're off again, Mr. Frank; away on your travels. Well, God speed ye; but, dear knows, I'm sorry to see ye goin'. Who knows what may happen 'tween this an' when you'll be comin' back? Who knows if iver we're to see other again?"

Frank dared not answer. Hurriedly he looked away; and there, far across the stretch of bright waters, Inishrath lay gleaming in the sunshine, and there was the white cottage above the trees, there the pier, there the lane up and down which Nan and he had passed so often. Nan and he? And now he was going; and who could tell whether he might ever see Inishrath again; ever see Nan again.

Think of the first time he had seen her, that bitter March day five weeks ago; of her talk, her welcome, of her lovely face and voice. And now he was going, slinking off, and dared not call her to the ferry; was going without so much as saying good-by! Think of the night before; of her face as she chose him, her eyes as she

looked at him. And now he was going! Think of the days, the happy days, that had seen him over there; there on the pier, on the hill, in Nan's garden. And now he was going! "Pull, James, or we'll be late. Pull, James, pull!"

"Eh? What?" asked James, leaning on his oars. "What ails ye, Mr. Frank?"

"Nothing, James; nothing. Only pull."

The cot glided swiftly toward the Lismahee pier. James ceased talking. Frank sat staring before him, striving not to think, to look.

'Twas the last time; a little while longer and he should see Inishrath no more. Ah, the dear, barren place; the dear old house; the never-to-be-forgotten lane and fields. Good heavens! There on the pier stood Nan!

Dared he look? She was there still; her white apron fluttering in the wind, a can in her hand. Now she raised the can; now stooped and dipped; now rested hands on hips and stood looking across the lake. What was she doing, thinking? Was she thinking of him? Was she longing for the night and the sound of his foot, the sound of his voice? And he was going; and she did not know; and never might he see her again! "Oh, pull, James; pull, for heaven's sake!"

"I am, Mr. Frank. Man, we're nearly there. Man, what ails ye?"

"Nothing, James. Only pull."

The cot came to the Lismahee pier, swung round; again Frank's eyes were on Inishrath. She was there still; looking across the waters, at him maybe; wondering, perhaps, what was afoot there on the Lismahee side. Ah, the sweet figure. Let him look at it once more. *Now, good-by, Nan; good-by, my dear!*

Frank rose; walked up the pier; shook hands with the sorrowful James; put his foot on the car-step and mounted. One last look, just one. She was there still; there by the shining shore.

"Are ye right, sur?"

"Yes—yes."

A crack of the whip, a bound and a jolt, a shout from James; and they were off. Could he see her still? He grasped the rail and stood up. Yes; there she was. He waved his arm. *Oh, good-by, Nan; good-by.* He could see her still—still—still. *Oh, good-by, Nan.* Now she stooped; took up her can; turned; was gone.

The stones rattled beneath the wheels; the horse strained in the shafts; the hedges flew past. Now came the hills, the little fields; now the brown flats of the bog-land; now the last glimpse of the lake.

Frank leaned an elbow on the well-cushion; laid head on hand and closed his eyes. Ah, but he felt lonesome, heartsore. He could see her now; see her standing on the pier, the dark trees behind her, the blue sky above, the lake shining away on either hand. She was thinking of him; longing for sight of him. Now she was going up the lane, singing in her joy. Now she was at the door; now she turned a moment and the sun flashed on her face. Nan's face; that face he might never see again! He shot upright in his seat; grasped the rail tight; sat frowning down at the road. Never see her again? Oh, 'twas cruel bitter!

The car flew on. The hills, cottages, bogs fell behind; far back, Garvagh woods were now but a long streak on the horizon; away in front, the roofs of Lismahee shone out. He was going; slinking away as cowards slink from the sun. He was leaving Nan, leaving her to pine and wring her heart; leaving her without a word. The coward he was, the pitiful cur. What would she think of him? What could she think? She chose him; gave herself to him; and now he was going without a word. He could not do it. He turned to the driver.

"Stop!" shouted he; and even as he spoke repented of the word. He was weak again. What could he say to Nan? Could he bear to see the light die on her face? "Drive on," said he. "Drive on."

The car crossed the railway track; spun on between the hedges, rattled over the stones. There was Lismahee, there the church, the poorhouse walls. It was not yet too late. Think of seeing her watch

for him; of coming to her, even to say good-by. Think of seeing her again, hearing her voice, feeling her hand lie warm in his. He must see her. Come what might, he must see her again. He leaned across and clutched the reins.

"Stop," he shouted. "I've forgotten something. You must turn back. Quickly, quickly; back, I say."

The driver pulled up; turned.

"Is it back to the shore, ye mean?" said he. "Drive the horse all that way, wi'out a rest or a bite in its throat? Arrah, whisht!"

Frank sprang off the car.

"Then go on. Leave my bag at the hotel, and say I'll come for it." He tossed half a crown upon the well-cushion. "There's something for you," he said; then turned on his heel and set back for the shore. And as he went, the piper played him adown the stony road, between the hedges.

The afternoon was wearing old when Frank turned his back on Lismahee; the sun was sinking when he came to the ferry. He hurried to the flag-staff; there paused and bethought him. Suppose he waited until night had come, then shouted and perchance brought Nan to the ferrying? That would be sweet. Think of her cry of welcome; think of sitting beside her, under the eternal stars, all the way to Inishrath. That would be glorious. He could tell her all, as the cot glided on; make parting sweet and lay up store of fond remembrance. Yes, yes. He turned from the flag-staff; seated himself on the pier; there sat looking fondly toward Inishrath and restlessly awaiting the dark.

How breathlessly peaceful all things lay and saw descend the merciful cloak of the night! Not a sound, not a stir; everywhere the solemnity and majesty of nature. This was life, this freedom; here men were dowered with gifts inestimable. What was trade, wealth, the tramp of countless feet, the surge of myriad life, the hum of ungodly cities? Mere vanities, ironies, enormities. But this, all this: pure sky, sweet earth, solemn silence, day flying sorrowfully, night pacing majestically: this indeed was the crown and glory of things. He could spend his life there; spend it well and bountifully. A little work; a simple home; perfect health; bright days; glad nights; and beside him—Ah, Nan, Nan!

But see. The stars were out; night had come; a light was twinkling above the trees in Inishrath. 'Twas time. He rose; between his hands called across the water; restlessly began pacing to and fro. Hark! Was that the rattle of oars? Yes. No. Again he called: *Ahoy–Ahoy–Ahoy–y–y!* Hush! Did he hear Nan's voice? No. Louder he called; louder still; shouted till his throat ached. And still no answer. He paced the shore; whistled; skirled; stamped on the stones at last, and swore. Here was a predicament. Miles from Lismahee; alone on a barren shore; not a boat; not a soul he knew; nothing for him but a weary tramp back to the town. Back from Nan? Back without seeing her? Not if he swam for it!

He ran here and there, whistling, shouting, stumbling; at last, far along the shore, in the skirts of a white-thorn clump, came upon a cot that lay, in her rottenness, half full of water and chained to a tree. It was no godsend; still, hurrah. He baled out; broke the chain between two stones; shoved and was off. The thole-pins were broken, the oars mere poles, the thwart too short; every hundred yards he had to bale for his life; it seemed miles from shore to shore; blessed it was, at last, to come thud on the stones, and to have mother earth once more beneath his feet.

And now for Nan. But softly. He must surprise her; give no sign till the latch rattled and in he went. He stole up the lane; trod on tiptoe past the broken gate and across the yard; went stealthily along the house wall, steadying himself with a hand sliding along the stones. Softly. There was the kitchen window. But dark! He pressed his face against the glass and peered. Only blackness. His heart sank. He crept to the door, lifted the latch and pushed. Firm as a rock. He stepped back, stumbled on the stones; instantly the dog in the stable be-

gan to bark. The brute! With his back against the wall, he waited till the noise ceased; then stealthily made for the lane. Again the dog barked. The cur! He sat down on the ditch and wiped his brow. Oh, the miserable disappointment; the cruel luck! But he must do something. In heaven's name, what? Go back; back without seeing Nan? No—no! He longed to see her. He must see her. Was there no way? Could he do nothing? Stay! Yes; yes.

Cautiously, Frank went down the lane; turned through the green gate; trod noiselessly along the path; came soon to the little garden and stopped below Nan's window. It was closed, dark. He gathered a handful of mold, scattered it against the glass; with his heart leaping in his throat, stood back and waited. Was she never coming? Again he flung; again waited breathlessly. Why did she not come? He picked pebbles from the path and crashed them against the panes. Surely now she must come. Yes. There was her dear face. At last; at last!

Frank stretched up his arms.

"Nan," he called. "Oh, Nan, Nan. Open, my dear."

A moment's delay. The window swung out. Nan leaned over the sill and looked down.

"Is it you, Frank?" she called softly. "Is it you?"

"Yes, Nan, yes. Oh, I'm so glad to see you. I—I couldn't go, Nan, without seeing you. I couldn't. I wanted to surprise you. I found all dark. I tried the door."

"Hush, Frank," Nan whispered. "They'll hear ye. Aw, I'm glad to see ye down there. Was I—was it hard to wake me?"

"Were you asleep, Nan; really, were you?"

"Surely. But why didn't ye come sooner? I watched for ye all the evenin'."

"Did you, Nan? Watched for me? And you wanted me to come to you?"

"Aw, yes. I did, Frank."

"And now I've—" Could he tell her? Could he see the pain gather on that face; quench the brightness in those eyes? How sweet she looked in the half darkness; her hair streaming down upon the sill, her hands folded below her chin, her dear face bright with the smiles of her love for him. How could he leave her? How could he live without her? He stepped upon the path and stretched up his arms.

"Nan, Nan," he called passionately; "I can't leave you. I can't go. I'll give up all—" His feet crunched upon the gravel. Round in the yard once more the dog began to bark. Nan waved her hand and drew back her head. Frank muttered an oath and let his arms drop. In a while the dog grew quiet. Again Nan's face showed at the window.

"Ye must be quiet, Frank," she said softly. "Ye mustn't wake them. Say good-by, dear, for this time, an' go. Do."

"No, no, Nan. I mustn't go yet. I mustn't. Oh, I want to tell you—"

"Hush, Frank. Aw, hush."

"Then come down to me, Nan."

Nan shook her head.

"No, Frank. Aw, no."

"Do, Nan. I must feel your hand—must kiss you—just once. Do, Nan."

"I can't, Frank. Aw, no."

"But you must, Nan. I've so much to say. I want to tell you. Before God, Nan, I can't leave you. I'm in your hands. If you tell me to stay, I'll stay; if you tell me to go, I'll go. Come to me, Nan."

But Nan, not knowing, not even guessing, shook her head again.

"Not now," she said. "Aw, not now."

"Only to the door," pleaded Frank. How sweet she was; how beautiful. "Come down," he cried. He stepped upon the path, his arms out, his face upturned. "Come down to me, Nan."

The dog barked again! Some one stirred inside the house; but to the ears of these two, the one standing pleading, the other standing wavering, came not a sound.

"Come down to me, Nan."

"Aw, Frank, Frank—"

How sweet she was. Barry crept closer to the wall. How beautiful she was.

"Nan," he whispered, "come down."

A sound in the hall; a thud against the

inside of the door; then John's voice shouting:

"Who's there? Answer, or I'll fire."

Barry sprang back.

"Who is it?" came again. "Confound ye, answer quick."

"No, John, no. It's Frank—Frank Barry."

"You're a liar. That's not his voice."

Barry recovered himself; stepped to the door and rapped softly.

"It's all right, John," he said. "Forgive me for disturbing you, but I was late in coming and I just wanted to say a word to Nan. Go to bed, like a good man, and good-night to you. . . . No, no; I've got a cot, thank you. . . . No, no; I couldn't touch a drop if you had gallons of it. . . . Good-night, John; good-night. . . . Thank God, you're rid of. And now—"

He raised his face; there, above Nan's window-sill, was a frilled night-cap and within it the yellow face of Sarah Butler. With an oath Barry drew back. For a breath the two stared at each other; then spoke Sarah:

"So, it's you, is it?" Her voice was big with meaning. "It's you, Mr. Frank Barry? You'll be late out."

Barry did not answer.

"I was thinkin' I knew your voice," Sarah went on. "Ye forgot yourself, I'm thinkin', an' raised it too much. Ay." "Well, I'll not be keepin' ye, Mr. Barry, out in the night air. It's bad for the health. But next time ye come maybe the dure'll be open for ye. An', whisht," said Sarah, pushing her head beyond the sill; "next time ye come on your divilments, be mindin' that dogs an' ould women have ears. Good-night to ye."

And Nan's window closed with a bang.

(To be continued.)

CYRANO DE BERGERAC, THE MAN.

BY G. P. MANCINI.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE ITALIAN "NUOVA ANTOLOGIA."

ROSTAND with his beautiful drama of "Cyrano de Bergerac" has not only enriched French literature with a masterpiece, but has rescued from oblivion a man who was to the highest degree unfortunate in life and after his death also. Already back in the seventeenth century Boileau was exclaiming, "Who has read Bergerac?" while in our own time, toward 1840, Charles Nodier was lamenting that he was so little known. "His was an irregular talent," he said, "unequal, capricious, confused, reprehensible in many ways, but still a talent full of invention and abounding in life." The secret of such oblivion is now clear. Bergerac was accused of being an atheist. In Rome he would have followed Giordano Bruno to the stake, in France they were satisfied in having him pass for a crazy person. His contemporaries did not admit that they read his works, which however circulated surreptitiously from hand to hand. The writers who lived on intimate terms with him did not have the courage to mention him in their writings. His devout friends robbed him of his manuscripts or destroyed them even up to his dying hour. The priests had the editions of his books put on the Index and burned as fast as they appeared. So if his name has come down to us in spite of this incessant warfare, we must believe that genius sooner or later receives its just reward.

His earlier biographers assured us that Cyrano was born at Bergerac, in Périgord, but more recently the register of his birth was found in the archives of the parish of St. Sauveur at Paris, dated March 17, 1619. His parents were well connected. His father was proprietor of an estate at Bergerac and the son added this title to his family name of Cyrano. His baptismal name was Savinien, from his paternal grandfather. Cyrano's close friend and

first biographer, Henri Lebret, tells how Savinien at the age of six or seven was confided to a country curate whose instruction pleased the boy so little that he gave his master the sobriquet of "Aristotelian ass." In 1631 his father sent him to the College of Beauvais at Paris, which was directed by a pedant more stupid even than the curate. This man Cyrano has handed down to our ridicule in his comedy of "The Pedant Tricked." Though intelligent and fond of study the boy led such a dissolute life that his father, who was now living at a distance from Paris, threatened in 1637 to withdraw his support from him. This threat gave rise to a letter written to the father, Abel Cyrano, by the friend Henri Lebret, in which Savinien is defended and the writer promises for him a different manner of living.

In the next year Henri and his friend enlisted in the Royal Guards, in a corps commanded by Carbon de Castel-Jaloux, the leader of Gascon soldiers as brave as himself. Cyrano in no way belied his associates, and in a short time, by the incredible number of his duels, by a hundred caprices and rash acts, had won the name of the "Demon of Boldness." In 1639 his regiment was sent against the Germans and Cyrano was severely wounded. But in 1640 we find him again in the field, barely recovered from his wound, at the siege of Arras. He had changed his company, as it appears, and was now one of the gendarmes of the Prince of Condé. Here he received a sword-thrust in the throat, which brought his military career to a close. Or, as Lebret says: "The disagreeable results of his wounds, the frequent duels which his reputation for courage attracted, and the great love he had for study made him forsake the trade of arms."

Gassendi, the celebrated philosopher, had opened a private school in the house of a certain François Luillier, whose son he was teaching. Cyrano, lively, turbulent, and desirous of learning, took it into his head to be admitted to it, with other youth of the time, among whom is said to have been Molière. Cyrano was then twenty-one years old. The collection of engravings at the Louvre has four portraits of him. All present him as a handsome youth, with regular features, intelligent countenance, and a glance full of fire and irony. A soft mustache shades his lip, which wears a malicious smile. His hair is thrown back after the fashion of the dandies of the time. But a monumental nose destroys the symmetry of his features, and lays on its possessor the constant obligation of descending into the arena for the purpose of punishing those who gaze at it too closely.

A favorite pupil of Gassendi, Cyrano, as a frequenter of the school, belonged in his youth to the so-called group of "libertines," free-thinkers, who read Montaigne and the most radical prints of the day. These incipient philosophers were the terror of their age on account of their personal characteristics, impatient of all rule and authority. Gassendi was accused of skepticism, even on account of his hatred for the doctrines of Aristotle, as they were then expounded. The chosen rendezvous of his adepts were the taverns of the capital, where wine flowed in streams in the midst of flashes of wit and poetry. But they were by no means excluded from the salons of the noble ladies whose refinement of language they often criticized, but whose freedom of thought they honored. Cyrano was first in the songs of the inns and the discussions of the drawing-rooms, as he had been first in duels and battles. He had a natural hardihood, a proud disdain of what is law, an arrogant tone of voice which stood him in good stead in the literary duels. These traits contributed, to be sure, to make him many enemies, but also won for him a large circle of friends. "Heaven," says Lebret, "decreed that he should have in his life many who would love him to his death and even beyond the grave." In the house of Jaques Rehault, a philosopher and celebrated lecturer, this group of intimates founded a society called the society of "Pointed Conversations." Cyrano conceived the idea of making a volume out of the witticisms, the sallies, and the literary judgments of these assemblies. But little

more than the preface of this book has come down to us, the author claiming that the greater part was forbidden because it attacked persons of note.

Though the critics are much divided on the subject, it would seem as if the first literary work of Cyrano was his comedy already mentioned, "The Pedant Tricked." Many indications show that this was planned, and perhaps written out and played, in the College of Beauvais itself. For comedy or tragedy is generally the form of literature which the youth of France prefer for their first attempts, and in this play of Bergerac's there is so much ingenuous incoherence, so much youthful vivacity, that we can hardly doubt he began it in his school-days. Later, after his years of military duty, when he wished to put it on the stage, he may very well have added to it, and inserted allusions to contemporaneous events. One of its characters, Chasteaufort, who is both timorous and boastful, may have been suggested by some soldier of the German or Spanish wars, though the type is also a traditional one in comedy since the "Miles Gloriosus" of Plautus. The pedant, the real hero of the play, is called Granger, which was but slightly altered from the name of the schoolmaster at the college. At all events it was to this comedy, which was put on the boards in 1645, and to the burlesque and sentimental poems which were read in the friendly gatherings of the taverns or salons, that Cyrano owed the notoriety that caused him to be sought after by all Paris, and which prevailed upon his correspondents to surrender his letters to publicity.

His poetry, to be sure, is not at all noteworthy. His epigrams, his political verse, and his burlesque songs do not in any way increase his reputation as a literary man or as a thinker. But his letters are far better. They reveal his talent, his heart, the elevation of his mind. They abound in witticisms, in descriptions that are now serious, now jocose, in thoughts that scintillate. We find in them the fresh fancy of youth combined with the maturity of later years. An image no sooner appears than it is clothed in a hundred fashions. Outbursts of genius are mingled with a keen observation of nature. What is false, what is affected, is gracefully confused by this sprightly pen with what is true. In those days it was the fashion to write in favor of the seasons of the year or against them, and Cyrano directs two letters against winter and autumn, while devoting two to the defense of spring and summer. Then the coward, the plagiarist, the pedant, the Jesuit, and magic inspire him in turn.

The finical language of the time, due to the prevalence of what is now called "preciosity," deserves the judgment he pronounces upon it in reference to the use of it in his own letters. "They are," he says, "a confused mass of conceits, of the first follies of youth." The description of love, whether in prose or poetry, required the envelope of a ridiculous jargon which stifled sentiment and good sense. But many of Cyrano's love letters are not wanting in traits of true, refined feeling. One letter, which is entitled "The Duelist," is a trustworthy document for the life of its author. "A Vision" displays great knowledge of antiquity and mythology. "The Siege of a City" tells of the dire want experienced by the French troops at Mouzon. The letters against D'Assoucy, Chapelle, and Scarron are cruel and sarcastic. In the "Letter against an Heroic Hypochondriac" Cyrano gives expression to a complete theory of literature, while criticizing the languid style of his contemporaries. He castigates the physicians most furiously: "What a fine art medicine is! What honors and riches it brings to those who cultivate it! If the patient escapes, his cure is attributed to the potent remedies of the one who has had him in charge and if he dies everybody exclaims that the skilful doctor had predicted it. Therefore we should all become physicians in order to bury those who have buried us."

In politics Cyrano was a conservative. Indeed, after a long conversation on the divine right of princes, he exclaims: "Ah! you dream of a republic! But I assure you that a democracy is the worst scourge which God can inflict on a state." Such opinions

fell in with the consensus of the ideas of his time. In the matter of magic, however, he went against the current, whether of popular or scientific origin, and in this opposition showed how courageous he was. In those days the names of Paracelsus and Nostradamus were in every one's mouth, while France as well as Germany believed in the wonderful and lamentable story of Dr. Faust. The witchcraft of which the doctor was a victim when he was rejuvenated by the devil in return for his soul, the contortions of people possessed by evil spirits, astrology, the research after potable gold, were favorite subjects of discussion. The were-wolf was an object of fear in the country districts, as it is to-day. Supernatural apparitions were of daily occurrence, at the court, in the convents, in cemeteries, and such apparitions announced future events. All such notions were treated by Cyrano in his letters with the utmost irony. He maintains that the devil should protect his servants, as otherwise he will make no proselytes. And yet all the sorcerers are as poor as Diogenes. In the same energetic manner he attacks the court which burnt Urban Grandier in 1654 on the accusation that he had cast a spell over the Orsolini family at Loudon. Many are the passages he devotes to exposing the absurdity of such beliefs.

Many anecdotes are related of Cyrano's bravery of body to correspond with this courage of the soul. One evening his friend D'Assoucy runs to him for shelter against his pursuers. He had insulted a great lord and the latter had hired a hundred ruffians to kill him and had posted them on the way to D'Assoucy's home. "Take a lantern and come with me," said Cyrano to him. "I will escort you home." The next day near the moat of the Gate of Nesle were found two dead men and seven wounded. Some time after this affair Cyrano got into a dispute with this same D'Assoucy, whom he accused of asininity, plagiarism, and worse things even, and D'Assoucy made up his mind to have revenge. A certain Brioché ran a kind of Punch and Judy show near the Pont Neuf, which attracted a great crowd of artisans, domestics, and hostlers, who were entertained by the acts and tricks of an animate part of the regular entertainment, the learned monkey Fagotin. D'Assoucy conceived the plan of dressing up Fagotin as Cyrano and teaching him to parry and thrust in Cyrano's well-known manner. Right in the midst of the performance arrived Cyrano himself, who, seeing all that rabble laughing at his semblance, was seized with unreflecting anger. Drawing his sword he struck out right and left, putting all to flight, and went so far as to kill the wretched Fagotin with a blow that pierced his breast. You may judge of Brioché's lamentations, the lawsuit that ensued, and Cyrano's mocking defense of his conduct. These incidents created much talk and only confirmed the general opinion that our hero had in his temperament a dose of madness. The critics attacked him more fiercely than ever. Diatribes and burlesque poems were directed at him, some of which have come down to the present day. Here is a satire on his personal appearance:

> Bergerac is not of the race of Lapps nor yet of the giants. His head is almost bereft of hairs. What are left on it can be counted ten paces away. His eyes flee away under his eyebrows. His nose, broad at the base and hooked, reminds you of the yellow and green parrots which come from America. His legs warring against the flesh resemble spindles.

The young man whom his detractors described in such a way was then twenty-five years old, but was already an honor to France. Dismayed perhaps by so unjust a war, and perhaps tormented also by an ill-requited love—as certain letters published after his death would lead us to suspect—he seems to have been induced to leave Paris and travel. It is quite well established that he went to England, because he says in his "Trip to the Moon" that he met Tristan l'Hermite there. Afterward he was in Italy and Rome. It is a great pity he did not describe the countries he visited with the same pen with which he wrote his imaginary trips to the sun and moon. It may be that his mind, already filled with

these visions of fantasy, did not take note of what he really saw. But in Rome he must have conceived his tragedy of "Agrippina," and perhaps sketched its principal scenes. For now he abandons comedy, lyric poetry, and controversy, and imagines a drama with a Roman subject, composing scenes and verses which Corneille himself will not disdain to imitate. He went away poor, he returned still poorer, having been forced to borrow money of a relative for his journey, as he himself states. He is obliged to yield to fate, to imitate the rest, to bid farewell to that independence he had so strenuously defended up to that time, and seek a patron. He found one in the old Duke of Arpajon, a distinguished soldier, who received the young and valiant writer into his household. Here he was to find for some years the quiet necessary for study, the means to publish what he should write, and was also to learn "how bitter the bread of others tastes."

It was here that the tragedy of "Agrippina" was written, probably in 1646–47, though it was not played till 1652 or 1653. Its subject is the conspiracy of Sejanus against the emperor Tiberius, in which Agrippina, widow of Germanicus, took a leading part. In the play Sejanus makes a public profession of atheism, according to Cyrano's enemies. A great scandal resulted. Sejanus, in fact, spoke as a Stoic of his time should, and it may be that he expressed Cyrano's views to a certain degree. Still our author cannot have been a confirmed infidel, for his nearest friends among women were those who had taken the veil; his aunt, Catherine, who died in odor of sanctity, and his cousin, Madeleine, widow of the Baron de Neuvillette, who had been killed at the siege of Arras. This lady had had no other thought from the moment her husband's death was announced to her than to pray and meditate on the mysteries of religion. With her Cyrano ever found sympathy and kindness in all his hours of sadness and hopelessness.

Already before "Agrippina" was acted at Paris Cyrano had said farewell to poetry in order to devote himself entirely to scientific pursuits. His mind, however, accustomed to laugh at everything, preferred to the dogmatic methods of exposition those that are more romantic and artistic. Actuated by these ideas Cyrano composed his "Trip to the Moon," in which, under the guise of a fanciful journey, he discusses questions which pertain to physics, politics, and religion. Assuming that the moon is a world like our own, he will have himself transported there by what we might call a natural means. He attaches to his person a quantity of vials filled with dew. This is evaporated by the heat of the sun, and he feels himself rising with it into the air. But he goes too fast. He breaks some of the bottles and descends. The earth, however, having turned while he was in the air, he lands in Canada. After various philosophical and scientific discussions with the inhabitants of this country he makes another attempt to reach his goal, and is finally carried up into the clouds by means of a machine for fireworks he has constructed in the form of a dragon. As its rockets successively burn out the machine falls back to earth, but Cyrano continues to ascend, owing to the fact that he had rubbed the bruises he had received in his preliminary failures with ox marrow, a substance on which the moon exercises overpowering attraction. Thus rising steadily, he finally arrives at his journey's end. The narrative now returns to such philosophical themes as give an opportunity to satirize the bigotry and superstitions of our own planet. At last our author grows homesick for earth, after a discussion of the immortality of the soul, and in the arms of a friendly demon, who had sojourned with Socrates and Cato in their lifetime, he is borne downward and lands in Italy.

After the composition of the "Trip to the Moon" it is probable that Cyrano lived for some time in the country with relatives or friends, for many of his letters and some of the best pages of his "Republic (or State) of the Sun"—a sequel to the "Trip to the Moon"—bear the imprint of nature's stamp. This seclusion must have been interrupted by trips to Paris, for we know

that he was quite a frequent visitor at his cousin Madame de Neuvillette's, with whom he often talked of nature and of the language of birds. On one of these trips he was seriously wounded by a stick of wood falling on his head as he was leaving Arpajon's palace. For a moment it looked as though the injury would be immediately fatal, but Cyrano recovered, though his health was shattered. Returning to the country, he improved for a few days, then grew worse. His faithful friends flocked to his bedside, with entreaties to save his soul from destruction by abjuring false doctrines and destroying his unpublished manuscripts. This last he refused to do. But the box which held them was broken into and the suspected writings disappeared. Apprised of this theft, Cyrano, though near his end, took refuge with a cousin, where he entrusted to Lebret's care a manuscript of the "Trip to the Moon," and at the same time prayed him to recover and publish the stolen papers also. But these Lebret never succeeded in finding. Cyrano soon succumbed to the results of his injury and died in the last days of September, 1655. In 1656 Lebret edited the "Trip to the Moon." In 1662 Charles de Sercey published what he claimed was a manuscript of the "Republic of the Sun," but which seems rather to be a collection of fragments bearing on that work, with shorter writings introduced to piece them out. But Cyrano's fame needed no other support than the "Trip to the Moon," a work which alone would have assured him an honorable place in the literature of his country, had it not been for the violent attacks of ignorance and superstition.

THE DREYFUS AFFAIR AND FRENCH PUBLIC OPINION.

BY H. R. CHAMBERLAIN.

IN the hour of the assassination of Carnot, M. Charles Dupuy, then and now prime minister of France, exclaimed in prophetic metaphor, "I hear the trampling of the horse, but I cannot yet see the rider." The Panama affair and many other serious public scandals had already stained the brief record of the Third Republic. They had failed to arouse the conscience of the nation. It is an open question, perhaps, whether the apathy of that day or the misguided, distorted passion of this constitutes the more serious symptom of the disease which is ravaging the French body politic. It is easy to condemn and denounce France for the crimes and outrages upon justice which have been committed in her name. According to stern, uncompromising Anglo-Saxon standards she merits rebuke and even denunciation; but such unsympathetic condemnation would be as unjust as the injustice which seems to be the most glaring of her faults. It is difficult for an American or an Englishman to put himself in the French point of view and to sympathize with the French, or, in broader terms, the Latin temperament. It is a foolish exaggeration to say, scriptural although the phrase is, that "all men are of like passions as we are."

It will not, I believe, be found an unprofitable task to review very briefly the chief features of the Dreyfus affair as they developed one by one before the eyes of the average middle-class French citizen. I take the Dreyfus case rather than its really more serious corollary, the Picquart affair, because the former came under public attention when the popular mind was less prejudiced than now. It is necessary to say in preface that at the time of Dreyfus' condemnation public opinion held the civil powers and politicians of the country, including almost all parties, in distrust and more or less indifferent contempt. The one emblem of national honor and power which commanded the unanimous confidence of the country was the army. It is not necessary to mention among the preliminary features of the public mind the

factor which is most often declared to be the cause and the explanation of the blind hatred of Dreyfus, namely, anti-Semitism. The recrudescence of anti-Jewish feeling in France had but just begun at the date of Dreyfus' arrest. There is ample proof that public prejudice against the Jews was being systematically fomented then as it has been ever since in France. The Dreyfus case has been a cause and an instrument of anti-Jewish propaganda instead of an effect. There is no denying that active and latent hostility to the Jews as a race has always existed in France, but even to-day it is less strong, less malignant, there than in Austria, Russia, or Germany. But to say that the French people at the outset refused to believe in the possibility of Dreyfus' innocence because of the race to which he belonged is to utter a gross slander against a maligned nation.

The first news of the discovery of treason in the headquarters of the army and of the arrest of the supposed traitor wounded the average Frenchman in the tenderest point of his patriotism. His indifference to corruption in the civil departments of the government became angry exasperation over the mere suspicion of rottenness in the inner citadel of the national defense. His anger was more than natural, it was inevitable. The trial and condemnation of the accused followed quickly after the news of his arrest. Nothing was made known of the nature of his alleged offense beyond the general accusation of betraying secret military information to a foreign power. There was no hint or suspicion that he had not been condemned strictly according to military law and precedent. Secret trials in certain cases are one of the few surviving abominations of the Middle Ages, made necessary, according to European judgment, by the abnormal military conditions which prevail throughout the Continent. Even now, in the light of the revelations of the past year, there is no serious movement for the abolition of all secret trials in France. The minister of war and certain officers of the headquarters staff made public declaration that the proof of Dreyfus' guilt was complete and overwhelming. All France, except the family and friends of the prisoner, received this declaration in full confidence, and they cannot fairly be criticized for doing so.

More than two years passed before the justice of the condemnation was seriously called in question. In the meantime that had happened which deprived the French people of the capacity to judge the matter fairly and impartially. The anti-Jewish campaign had been carried on throughout France persistently, shrewdly, and with ruthless malignity. The extent, the motives, and the ulterior aims of this conspiracy are not yet fully disclosed. Its methods are utterly unscrupulous. Its principal instruments, of course, are the anti-Semitic newspapers. Upon these journals rests the chief responsibility for the present desperate crisis in the political fortunes of France. And upon no publication does the guilt of fostering race hatred rest so heavily as upon the *Petit Journal*, the newspaper which possesses the most gigantic circulation in the world and which, unhappily for France at the present moment, wields the greatest influence among the French masses. Not until within the past three years has the immense power represented by the daily issue of a million copies of this journal been deliberately used to inflame one of the most evil of human passions. Its persistent suppression of the truth throughout the Dreyfus revelations, its distortion of facts, its mendacious deception of its readers, and, finally, its systematic appeals to prejudice have done more than all other influences combined to lead French public opinion astray.

The venality of a very large section of the French press is notorious, but the French people know no other journalism than their own. The French, indeed, are more insular, more ignorant as a people of the world outside their own borders than any other civilized nation except Spain—and the Spaniards within the past year have learned many things of which the French are still ignorant. It is this ignorance which permits the reptile press of

France to wield an influence that is out of all proportion to its merits, and which has made it possible to delude the French people for months after the rest of the world had been undeceived with respect to the facts of the Dreyfus injustice.

The agitation on behalf of the prisoner on Devil's Island, based upon the assertion of his innocence and of his illegal condemnation, aroused at first only an intense national resentment. How could it be otherwise under the circumstances? Was it easily credible that the highest military authorities of France had been deceived in a comparatively simple matter, or that they had combined to commit the unspeakable infamy of condemning an innocent man for no adequate motive? It would require overwhelming proof to convince any people of either hypothesis, and the proof on behalf of Dreyfus was not overwhelming at first. What wonder that France grew angry over such insinuations? Neither is it strange that under the incitement of reiterated attacks upon the people's idol and pride—the army—and fostered by insidious appeals to prejudice and passion, the popular anger developed into a blind, unreasoning fury. It may be an exaggeration to suggest the existence of a form of insanity which can afflict an entire nation, but when observing the effects of the Dreyfus agitation in Paris during their extreme manifestations last winter I became sincerely convinced that France for the time being was insane upon that subject.

The publication of the facsimile of the *bordereau* and the persistent, undenied assertion that evidence had been submitted to the Dreyfus court-martial without the knowledge of the accused or his council, comprised the only public grounds for demanding a revision up to the date of the first Zola trial in February last. The identification of the handwriting of the *bordereau* as that of Esterhazy had been met by the reply that no doubt the traitor had imitated the latter's hand. The fact that Germany had officially denied ever having had any dealings with Dreyfus may be dismissed as an irrelevant incident as far as French public opinion is concerned. Such a denial would be expected quite as a matter of course, no matter what the truth might be, under the existing standards of international ethics in certain European chancelleries. The German disavowal did not even excite a smile of derision in France.

It is not surprising under the circumstances that the Revisionists failed to gain a hearing until Zola issued his "J'accuse" philippic. Zola's act was brave, patriotic, and righteous, but it is necessary to be very frank about the standing and reputation in his own country of the man who thus boldly rebuked France in order to understand the effect which his scourging words produced. It must be said that to a very large class of his countrymen Zola was still known as the writer of grossly immoral literature. It is true, unfortunately, that the publication of literal translations of some of Zola's earlier works would not be permitted in England or America. His later work has not yet effaced his earlier reputation in France. It is easy to understand, therefore, that "J'accuse" aroused a storm of natural and genuine indignation, and that the average Frenchman should exclaim, "Who is this foreign-born writer of impure fiction, that he should assume the rôle of censor of the rulers of France?" If "J'accuse" had been written by Schuerer-Kestner it would have had a different reception. But Zola must not be deprived of any of the credit for his chivalrous and virtuous act. He and the guilty suicide, Henry, made revision possible and inevitable.

With the Zola trial, the fury of unreasoning prejudice in France reached its height. The tide turned as soon as time had given opportunity for realization of the gross informalities and the stifling of truth committed by the officers of justice who presided at that farcical proceeding. The revulsion began in earnest with the revelation of Henry's forgeries. It is still by no means complete. The best evidence of its progress is the change of attitude with regard to the condemnation of Dreyfus on secret evidence. The Zola trial virtually

established the fact that this fatal violation of law and the primary rights of the accused had been committed. But this crime was openly justified in France by press and public on the ground that the "safety of the state" demanded it. Comparatively few justify it now, and if the Court of Cassation should decide that for this reason alone the condemnation is void, there will be few except the most violent and fanatical Jew-baiters to protest.

The foregoing most cursory review of the development of French public opinion with respect to the Dreyfus case may serve to make the attitude of the masses more comprehensible to American minds. I assume that the chief features of the affair itself are familiar to CHAUTAUQUAN readers. It is not worth while to dwell upon the disputed points, because the judgment of the Court of Cassation will soon be pronounced and this will probably remove all important doubts. Inasmuch as it is believed, even by the anti-Dreyfus partizans, that the prisoner was illegally condemned, it may be taken as almost a foregone conclusion that the judgment will be revised. The question arises, What then? It is a question pregnant with uncertainty and with ominous misgivings for France. The Dreyfus case, as I intimated at the outset, is but a symptom of a dangerous political disease.

France is not a republic, except in name. Any one who has studied and personally observed the operation of so-called republican institutions in France will indorse that statement. It is doubtful if a true republic can exist in a country which maintains a standing army, virtually upon a war footing, and kept at fighting strength by conscription. The temptation to military usurpation is too great. The only protection which France possesses to-day against a military *coup d'état*, and, it is to be feared, the only barrier which has kept it off during the past few months, has been the jealousies and lack of strong leadership among the officers at the head of her army. I do not believe that any conspiracy involving the higher officers of the general staff existed at the time of the Dreyfus condemnation. They honestly believed him guilty. Perhaps they do yet.

It is impossible, however, to give an innocent interpretation to the policy which has been pursued by the military authorities of France in the Dreyfus affair and toward Colonel Picquart during the past few years. Honest error has unquestionably led to deliberate and dishonest injustice. The real writer of the *bordereau*, Esterhazy, was shielded in every possible way by his chiefs so long as it was possible to conceal his infamies. Men who can be guilty of such black offenses would not be restrained by any moral scruples from conspiring against a form of government which does not command their loyal sympathies. There is some reason for believing that lack of courage and capacity may still prevent any attempt at more daring and more ambitious action by any of the French generals. All of the pretenders to the French throne fortunately are also lacking in the necessary qualities of courage and capacity which might lead them to take advantage of the present crisis.

The French Republic has received a terrible blow, indeed a series of blows, in its very citadel—the hearts of the French people. If its institutions were more genuinely republican and if its citizens possessed more of Anglo-Saxon conservatism and steadfastness the danger to the Third Republic would not be serious. But the violent vicissitudes of French history furnish small guarantee of stability, once the confidence of the people has been shaken. A commanding personality has, however, always been the first requisite of a change of government in France. But where shall he be found? The trampling of the horse is louder than ever, but he is still riderless. Somebody's attempt to leap into the saddle may possibly furnish one of the great spectacles of the new year.

COCAINE AND ITS USE IN SURGERY.

BY A. DASTRE.

TRANSLATED FOR "THE CHAUTAUQUAN" FROM THE FRENCH "REVUE DES DEUX MONDES."

THAT cocaine has numerous and frequent uses in medicine and surgery and that under this head it must concern medical art in its different branches is a truth scarcely disputable; that would not be sufficient reason for speaking of it here. But if we add that the history of this alkaloid interests theory almost as much as it does practice, that it has given rise to controversies in physiology and chemistry still hardly allayed, and that it puts on trial some of the principal doctrines of the sciences, we utter a truth less commonplace and one of which many practitioners are doubtless ignorant. This is precisely what we propose to show here.

The alkaloid of the leaves of the coca *(Erythroxylon coca)* was presented to the medical world by a well-known oculist of Vienna, Carl Koller, at a session of the Congress of Ophthalmology which took place in September, 1884. Since that time cocaine has not ceased to be one of the most valuable aids of ocular surgery. If five or ten drops of a solution containing one part in a hundred of cocaine are infused into the eye, the cornea and the conjunctiva are rendered insensible, and—a circumstance which is also of definite value when operations upon that organ are considered—the parts affected are rendered bloodless by the contraction of the blood vessels, so that there is at the same time an economy of suffering and an economy of blood for the patient.

The particulars of this remarkable action of cocaine upon the eye have been learned progressively. For example, it has been ascertained that sensibility to suffering disappears first; the surface of the eyeball becomes inaccessible to pain, while remaining sensible to the action of contacts and to heat and cold. A little later tactile sensibility is deadened, and finally sensibility to heat vanishes in its turn. This is a remarkable case of disassociation of sensibilities. Besides rendering the membranes of the eye insensible to pain and bloodless, cocaine acts upon the pupil, dilating it as does atropine, but with some differences, namely, that the cocainized pupil contracts under the action of a bright light, which does not happen when atropine is used. The eyelids are separated and the eyeball is fixed in immobility. We omit other details.

The valuable agent which thus made its appearance in ophthalmology had been obtained twenty-five years before by a German chemist, Niemann. This was the third time it had been discovered and prepared in less than four years, having been discovered in America as well as in Germany; it was the last time; cocaine was never again to fall into oblivion.

The anesthetic action and the effect of contracting the blood vessels that it exercises upon the membranes of the eye are produced also upon the other mucous membranes, those of the larynx, the ear, the nasal passages, the gums, etc. It renders them insensible and uncongested; for a moment it quiets the inflammation of which they are the seat. Having made its appearance in eye surgery, cocaine rapidly spread in special surgery of the different organs and even penetrated to gynecology and obstetrics. A last step remained to be made in this march of cocaine invading the different annexes of surgery. It must be introduced into surgery proper. This is what a French surgeon, M. Paul Reclus, has attempted to do in the last few years. He has substituted cocaine for the general anesthetics, chloroform and ether, in many operations.

Such is the abridged history of the manner in which cocaine has become installed in medicine.

This rapid extension of the uses of cocaine has brought a corresponding extension of the culture of the plant which furnishes it; and its exploitation has been singularly developed in the two regions of the globe which are favorable to it. In the first place South America, with Columbia and Jamaica and especially Peru and Bolivia, is its native land. In the last two countries the annual production of coca leaves reaches more than 27,500 tons. The plant is also cultivated abundantly in Asia, Java, Ceylon, and the English Indies. It is a shrub whose trunk is covered with a whitish bark, while the rough, reddish, and often thorny branches bear green lustrous leaves.

Different varieties of it exist. The most advantageous is the one most abundant in Peru and Bolivia and it owes its superiority to two circumstances: first, its leaves are large, and, second, they are rich in cocaine. On the contrary, the variety exploited in Java has narrow leaves, and the cocaine is mixed with other alkaloids, homologous from the chemical standpoint but not equivalent for medical use.

It is well known that in Peru and Bolivia the popular use of coca leaves is immemorial. The inhabitants of these countries chew these leaves mixed with lime or with the alkaline ashes of certain plants. They thus prepare cocaine in the buccal cavity by displacement by means of a base; chemists do nothing more in their laboratories when they wish to obtain the alkaloid.

But what the Peruvians demanded and still demand of cocaine, which they thus prepare without suspecting it, is not that it should render the mouth or throat insensible or uncongested. This local and little desirable effect is not what they seek, although its existence has not escaped them. There are other general effects which follow the absorption of the substance, drawn with the saliva into the stomach, which are more highly valued; these are a pleasing excitement, a feeling of well-being and comfort. In fact, popular opinion attributes to coca the remarkable property of suppressing the sensation of fatigue which accompanies long marches and painful labors, of weakening the symptoms of the dreaded mountain sickness, and of dissipating or rendering bearable the sensations of hunger and thirst. Coca was also the sacred plant of the ancient Peruvians; they burned it in their religious ceremonies upon their altars to the sun.

In our epoch this opinion of the virtues of coca has received a more scientific expression. It is said that coca combines the remarkable virtues of tea and coffee, that it prevents loss to the system, is a typical economic food. Nothing justifies these assertions. The only thing certain is that coca is an excitant, that it produces general stimulation. It offers the advantages and the inconveniences of stimulants such as alcohol, for example. Useful when employed with wise moderation, and at intervals, it becomes harmful when used without discretion. It constitutes in this case an agent of exhaustion which leads its victims to extreme emaciation, to physiologic decadence, and atrophy.

The abuse of cocaine entails analogous consequences. In spite of the recent date of its introduction into medicine there are already inveterate cocainomaniacs as there are morphinomaniacs, and it may be said of them more justly even than of the consumers of coca that they are beings physiologically ruined. Independently of the nervous troubles from which they suffer, they are deprived of appetite and slumber, and in their cases longer and longer periods of atrophy alternate with shorter and shorter periods of excitement which they owe to the use of the poison. These cocainomaniacs are frequently encountered; at first they were found among dentists who were led to use the substance in the exercise of their profession. Often the same subjects pass from morphine to cocaine or use them together. They seek in the habitual use of the poison a cerebral stimulation which draws them from their despondency and allures them with new and lively impressions, and a sort of intoxication analogous to that which opium smokers love to procure for themselves. Specialists in the

treatment of mental diseases who have encountered some of these examples agree in recognizing cocaine as a poison more formidable than morphine. It provokes much more rapid and intense intellectual disorders; these are different hallucinations and the ordinary manifestations of delirium increased. Motor troubles are more marked in the case of poisoning by cocaine, and finally there is manifested a very remarkable change of the cutaneous sensibility, consisting of tingling sensations which give the sick person the impression of little insects walking over the skin which he attempts vainly to snatch away. As happens in the case of so many other persons afflicted with nervous diseases, these troubles increase at nightfall, at that twilight period dreaded by sick people which psychiatrists call the hypnotic period.

The physiological rôle of cocaine has given place to a discussion very interesting from the standpoint of facts and very instructive from that of doctrines. It would seem at first sight as if a careful experimenter could not experience any difficulty in determining the general effects of cocaine, that is to say, those which the substance produces when it has penetrated into the blood and been distributed to all departments of the organism. One might think that it was only necessary to open the eyes in order to observe the picture which unrolls before them.

One who observes the physiological effects of cocaine will see in the picture three dominant traits which will seize his attention and which form what might be called the symptomatic trilogy of poisoning by cocaine; these are motor agitation, general insensibility, and the constriction of the blood vessels.

It does not need much reflection to understand that all three of these essential traits of poisoning by cocaine are phenomena of the nervous order. They show the injury done by the cocaine to the sensitive motor and vasomotor nerves, or to the nerve centers which govern them. These are not the only manifestations of the power of cocaine, but they are the principal ones.

The action of cocaine upon the sense of taste has permitted a very far-reaching analysis of the different sorts of sensibility. It is true that this action is not observed when cocaine is administered internally; the solution must be applied directly to the tongue. When this is done the sensibilities are observed to vanish one after the other. First the sensibility to pain is suppressed, then the disappearance of the taste of the bitter is verified, and successively the tastes of the sweet, the salty, and the sour disappear, and finally tactile perception, which has resisted longest. Tactile sensibility disappears at last; sensibility to heat alone remains.

We must omit all these facts more or less worthy of interest and come back to the three fundamental phenomena by which the influence of cocaine is particularly manifested: agitation, vascular constriction, and insensibility. They are of nervous origin.

It is with regard to its nervous action, that is to say to the fundamental action of cocaine, that the physiologists are divided. Two different conceptions of the physiological rôle of cocaine exist. One likens it to a sensory curare (that is, a poison of the motor terminations), and the other likens it to a general anesthetic. The controversy is relative especially to the power of cocaine to render the nerves insensible to pain; to reality of this power, its degree, and the mechanism of its production.

There are two ways of administering cocaine with a view to suppressing sensibility. It may be injected into the veins, thus entrusting to the blood the care of bringing it into contact with the different tissues. This process is far from efficacious, as it is sure to be successful only with animals that are but slightly impressionable, and because in man it often produces an increase of sensibility. The second process, which succeeds always and with all animals, consists in bringing the cocaine in contact with the different tissues by local and direct application.

Herein lies a sort of physiological paradox; for example, an organ like the eye may receive cocaine in two ways, from the

outside by direct application, or from within mixed with the blood. In the first case sensibility will be paralyzed, in the other it will not be.

The explanation of this paradox is simple. It is a question of doses. In the eye which has undergone infusion, the nerve elements of the conjunctiva are in contact with a very dilute solution. To inject cocaine under the skin or into the veins is to put the tissues in contact with small doses; to apply the solution of cocaine (at one per cent) directly is to bring the same tissues into contact with large doses, doses even colossal in relation to the preceding ones. It may be said, then, that in the case of the local application of a solution, at one per cent, there is set at work a dose two hundred times as great as one which would be mortal if introduced into the veins.

Local application, as we have seen, amounts to putting massive doses of poison in contact with the tissues to be rendered insensible. Cocaine paralyzes the sensory nerves that it reaches. It is capable of acting upon the nerve fibers themselves, but when it is applied to a mucous membrane, it does not go as far as that, it attacks only the delicate disassociated nerve elements of the terminations. The most impressionable mucous membrane is that of the conjunctiva and the cornea because it is there that the nerve terminations are most accessible.

The second process consists of introducing cocaine into the blood; it amounts, as we have said above, to administering small doses. In this case the animal, or at least its sensorium, must be very impressionable in order to produce insensibility to suffering.

What is the cause of the insensibility this time?

Some physiologists have been led to claim that it is the same as in the preceding case; that it is still a paralysis of the sensory nerve terminations which are now reached by blood irritation from within, in place of from the outside as in the preceding case.

According to the authors of this theory insensibility produced by cocaine, altogether different from that of chloroform or ether, is peripheral, it is limited first to the surface of the body. The skin of the cocainized animal represents an inert envelope, a barrier inaccessible to impressions coming from the exterior world.

But in order that this opinion be justified, it is necessary that in a case where cocaine is administered internally, the action should be really manifested upon the sensory nerve terminations to the exclusion of the other parts, marrow, brain, and motor nerves. Up to 1889 it was believed that such was really the case; to-day the contrary is known. Numerous experimenters have recently shown that absence of sensibility to pain is not a characteristic and essential trait of poisoning by cocaine and that this substance is not confined in its action, even at the beginning, to the domain of sensitive terminations. In reality all the parts of the nervous system are affected.

But in what order are these organs affected? There is still a little uncertainty with regard to this, and all experimenters do not agree perfectly. However, the following chronologic succession may be admitted as approximately exact: the brain will be affected first, then the spinal cord, then the bulb of the spinal cord, later the motor nerve fibers (before the spinal cord according to one opinion), finally the sensory nerves, and lastly the nerve terminations.

This order is precisely the same as that which corresponds to the action of anesthetic agents such as chloroform and ether; and this is a strong reason for considering cocaine not as a sensory curare, but as a poison related to general anesthetics.

A comparative examination confirms this new view of the rôle and place of cocaine. General anesthetics present two essential characteristics: universality of action and temporary character. Claude Bernard has well shown that these traits are necessary and sufficient to define them.

Now cocaine exercises a universal action upon living matter. This fact was at first contested, but more attentive study has brought definitely to light its reality, as well as its temporary character.

Cocaine presents doubtless less clearly than chloroform and ether, but sufficiently nevertheless, the attributes of veritable anesthetics. It must be classed in the same family, at some distance below them, but above other poisons such as strychnine or atropine, of which some traits are recognizable in the picture we have just given of its effects.

All this may be resumed in a brief formula: Cocaine is an anesthetic of weakened action, it is a general anesthetic that surgery cannot utilize in general anesthesia.

But, on the other hand, surgery has made the most of cocaine for local anesthesia, using it to render the region which is to undergo the operation insensible to pain.

We have spoken of the extent of its employment in ocular surgery. Its intervention in dental surgery is not less frequent. It is also utilized for small operations upon the larynx. It serves to facilitate the penetration of the probe into the middle ear, to weaken the sensibility of the urethral mucous membrane, etc. Its applications are innumerable.

When in place of superficial insensibility the physician seeks a more profound anesthesia, he is not content simply to moisten the bare surface with a solution of cocaine; he makes it penetrate by injection into the thickness of the dermis wherever the knife is to pass.

It is important that the substance remain at the point where it has been placed; first, in order to render insensible the path of the future incision, but also for another reason. The diffusion of the poisonous agent in the organism must be avoided at any price. The weakest solution employed for localized anesthesia is still two hundred times too strong for external use, as we have shown. Its penetration into the blood would be the signal for the occurrence of the more or less grave accidents of intoxication by cocaine.

Accidents were so multiplied at first in the practice of dentists and physicians that many of them renounced cocaine. It was considered an agent of uncertain action and very dangerous.

In order to take all precautions a vain attempt to reduce the quantity of the dose was made. It was a very remarkable fact in the physiologic action of cocaine that the size of the dose is not the only circumstance which governs the intensity of its effects. The degree of concentration of the solution must be taken into account. A small quantity of the alkaloid in a concentrated solution produces effects infinitely more energetic than a greater quantity in a weak solution. The real reason of this influence still escapes us.

Surgeons, who, like M. Reclus, have proposed to extend to a great number of ordinary operations the method of producing insensibility to pain by cocaine have run against deep-rooted obstacles. They have attempted to dissipate them by showing that in reality the number of authentic accidents has been very much exaggerated, and that it was possible to avoid accidents almost entirely. It was only necessary to observe very attentively the rules laid down. They may be summed up in the three following points: employ weak doses, less than ten centigrams; utilize weak solutions, of one per cent, for example; practice a running injection.

The solution of cocaine ought not to be introduced into the soft tissues where it would risk being diffused, but into the thickness of the dermis, which retains it better. While he is pushing the piston of the syringe the operator should have care also to move the point of the fine tube, so that if he happens to encounter a vein there will be no opportunity for a large quantity of the liquid to enter.

Thus employed in a prudent and methodical fashion, cocaine presents decided advantages over chloroform and ether, the general anesthetics, and can be used without inconvenience in a great number of the operations of ordinary surgery.

All these ideas upon the exact nature of the perils of the absorption of cocaine, and upon the rigorous rules of its employment, are, it is needless to say, of relatively recent acquisition. They characterize, in the history of the application of cocaine, the progress accomplished in the last ten years.

HISTORY AS IT IS MADE.*

Ratification of the Peace Treaty. After two months of debate, which proved to be one of the great historic discussions in the upper branch of Congress, the Senate ratified the treaty of peace with Spain without amendment and without passing any resolutions declaring a Philippine policy. Up to the hour of taking the vote, on February 6, it appeared to be doubtful if the necessary two thirds would be secured for ratification; the roll-call gave fifty-seven ayes to twenty-seven nays, one more than two thirds of those voting, not counting pairs. By parties the final vote was: Yeas—Republicans, 39; Democrats, 10; Populists, 3; Silver, 4; Independent, 1. Nays—Democrats, 22; Republicans, 2 (Messrs. Hoar and Hale); Populists, 2; Silver, 1.

It is impossible to cover here the points made in the memorable debate on this treaty. It may be said, however, that the position taken by Senator Spooner (Rep.), of Wisconsin, represented the element which turned the scales in favor of ratification, *i. e.*, doubt as to the expediency of an expansion policy, but belief that ratification was necessary to clear the way for a free hand to adopt such a policy as Congress, representing the people, shall see fit.

The treaty itself, it will be remembered, cedes the Philippines to the United States, along with Puerto Rico and other West Indian islands, and the island of Guam, while in Cuba Spain simply relinquishes sovereignty and title. We are to pay Spain $20,000,000. Property rights, public, private, ecclesiastical, etc., are to be unimpaired; inhabitants are to be secured in the free exercise of their religion, and "the civil rights and political status of the native inhabitants of the territories ceded to the United States shall be determined by Congress." To what extent inhabitants of the ceded territories become naturalized citizens of the United States by the mere act of cession is one of the chief questions mooted in connection with a congressional determination of policy.

As formulated and signed in Paris, the treaty required ratification upon the part of Spain by the queen regent only. The queen, however, informed Premier Sagasta that it was her royal pleasure that the treaty should be ratified by the Cortes (called to meet on February 20 for that purpose), as she was not justified in signing it alone, and thereby incurring the consequences of its effect upon public feeling.

DR. JACOB GOULD SCHURMAN.
President of Cornell University.

A Battle With Filipinos. On Saturday night, February 4, following a proclamation of war by Aguinaldo, the titular head of the Filipino government, hostilities were opened between the insurgents and the American

* This department, together with the book "Europe in the Nineteenth Century," constitutes the special C. L. S. C. course Current History, for the reading of which a seal is given.

PROF. DEAN C. WORCESTER.
Of the University of Michigan.

forces at Manila. Dispatches report that Filipinos who persisted in running the American guard were fired upon, after which a signal from an insurgent blockhouse inaugurated a general attack. On Sunday the fighting began in terrible earnest, and continued until the Filipinos had been driven back five or six miles from the city, with an estimated loss of about 4,000 killed and wounded. The reported American casualties were 250; about fifty killed.

The force under Major-General Otis numbers about 18,000 men—some 3,000 of them regulars—with a reported sick list of nine per cent. Admiral Dewey cooperated with the land forces in deadly shelling of insurgent positions, and he commanded the harbor of the city, where troops effectively policed the streets and preserved order in all quarters.

The insurgents concentrated about Manila, according to General Otis' estimate, numbered over 20,000. They possessed several quick-firing and Krupp guns and many Mauser rifles of the latest pattern.

Besides the declaration of war, Aguinaldo issued a second proclamation declaring that hostilities were unjustly and unexpectedly provoked by the Americans; he refers to "useless conferences," "contempt for the Filipino government," "premeditated transgression of justice and liberty," and says his efforts to avoid armed conflict "were useless before the unmeasured pride of the American representatives." Agoncillo, representative of Aguinaldo's government in Washington, departed for Canada upon the outbreak of war. During his stay at the capital he submitted a number of communications to the State Department, setting forth Filipino claims to independence, but he received no official recognition. Filipino juntas in Hong-kong and London asserted that hostilities were provoked by Americans in order to have a pretext for securing control of the water-works of the city of Manila, which had been held by the insurgent forces. They predicted that if driven back to the mountains, the insurgents would hold impregnable and commanding positions for further contests. After his defeat, however, Aguinaldo asked for a cessation of hostilities and a conference, a request General Otis declined to answer.

Colonial Administration. In order to secure further authoritative data upon which to base our policy in the Philip-

COL. CHARLES DENBY.
Ex-Minister to China.

pines the president appointed a commission of five members, whose *personnel* was universally commended. Gen. Elwell S.

Otis, governor-general, and Admiral George Dewey, stationed at Manila, are two members of the commission. Dr. Jacob G. Schurman, president of Cornell University, Charles Denby, ex-minister to China, and Prof. Dean C. Worcester, of the University of Michigan, complete the list. Professor Worcester spent three years and a half in the Philippines, and his book recently published, entitled "The Philippine Islands," is a mine of information upon conditions that obtain there.

The last of the Spanish troops left Cuba for Spain from the port of Cienfuegos, on February 6. About the same time alleged differences between General Gomez, commander-in-chief of the Cuban army, and United States authorities were cleared up. Robert P. Porter and Señor Quesada, after a conference with the general, found him willing to accept the offer of a payment of $3,000,000 to the Cuban troops through Governor-General Brooke at Havana, with whom he agreed to confer, and also offered to cooperate in military administration looking toward ultimate independence for Cuba.

BRIG.-GEN. CHARLES P. EAGAN.

A colonial board, charged with details of administration, taxes, franchises, etc., has been added to the machinery of the War Department. Its duties are described as advisory to the secretary of war, but inasmuch as the great mass of local government matters will be referred to them pending congressional legislation for the government of dependencies, the board becomes an important body. Its members are Gen. Robert P. Kennedy, of Ohio, George W. Watkins, of Michigan, and Henry Curtis, of Iowa. They go first to Cuba, and to Puerto Rico and other islands later.

JOSEPH H. CHOATE.
Ambassador to Great Britain.

Court-martial of General Eagan. Brig.-Gen. Charles P. Eagan, commissary general of the army, has been suspended for six years, a term extending beyond the date of his retirement from the active list in January, 1905. This sentence by the president commuted a court-martial's finding for dismissal, on charges of conduct unbecoming an officer and a gentleman, and conduct prejudicial to good order and military discipline. General Eagan's offense consisted of appearing before the War Investigating Commission and reading a type-written statement repeatedly calling Commanding-General Miles a liar and using unprintable language in his denunciation. The commission, after hearing his statement, returned it to

him as unacceptable, and later received it in modified form, together with General Eagan's explanation that he had been goaded to desperation by reflections upon his department in General Miles' testimony. When General Miles appeared before the commission he reported that investigation had shown that "embalmed beef" had been furnished to the army under what had been called a "pretense of experiment"; that the beef was unfit for food and had made soldiers sick. General Eagan's method of reply resulted in a court-martial, Major-General Merritt presiding, with the result as stated. Members of the court-martial recommended clemency, and the president took into consideration "a long and honorable record of service" in making the order of suspension, which deprives General Eagan of rank and duty for six years, but leaves him his salary of $5,500 per year. It is to be noted aside from this offense that a letter (recently made public) written by General Eagan to a private citizen who had called his attention to complaints about supplies furnished to the

SENATOR NATHAN B. SCOTT, OF WEST VIRGINIA.

soldiers, contained unwarranted personal abuse, in terms only less vulgar than those applied to his superior officer.

The Army Beef Scandal.

The public, however, took more interest in the question of the truth or falsity of the charge that

SENATOR PORTER J. M'CUMBER, OF NORTH DAKOTA.

bad beef had been sent under contract to the soldiers than in the apparent fight between Commanding-General Miles and the officiary of the War Department. General Miles' statement to the War Investigating Commission was followed by the publication of later statements in which he was given as authority for charging, as the result of investigation regularly begun last September:

> I have overwhelming evidence that the embalmed beef was treated with chemicals in order to preserve it. I have affidavits from men who saw the beef undergoing the treatment, or embalming process.
>
> Now, as to the canned roast beef; that was different from the embalmed beef. The canned roast beef was the beef after the extract had been boiled out of it. They put this beef pulp up in cans and label it "canned roast beef." The soldiers report that the canned beef was nauseating. If swallowed it could not be kept on the stomach.

These charges, based on reports of thirty regimental commanders, were supplemented by the publication of similar statements from some eighty subordinate officers, privates, and civilians. Newspapers also declared that disreputable relations had been discovered between representatives

of the meat-packing establishments, the War Department, and members of the Investigating Commission. Other newspapers sharply attacked General Miles for using the press to undermine discipline in the army. The scandal in all its phases demanded a court of inquiry, according to newspaper expressions of sentiment throughout the country.

On February 9 the president appointed a court of inquiry consisting of Major-General Wade, Lieut-Col. George B. Davis, Ninth Infantry, brigadier-general of volunteers, Col. George L. Gillespie, corps of engineers, and Lieut.-Col. George B. Davis, deputy judge-advocate-general of the United States army, recorder.

Diplomatic Changes. For the important post of ambassador to Great Britain, vacated by John Hay in order that he might become our secretary of state, President McKinley selected Joseph H. Choate, of New York City. Mr. Choate's reputation is that of a leader of the American bar for the last decade. He was one of the counsel in the famous income tax case, decided by the Supreme Court of the United States in his favor and against the tax. He has been honored with the presidency of the American Bar Association, and served as president of the Constitutional Convention of New York State in 1894. He is a graduate of Harvard, Class of '52, and has reached the age of sixty-six.

Charlemagne Tower, of Pennsylvania, has been transferred from Austria-Hungary to the post of ambassador at St. Petersburg. Addison C. Harris, a prominent Indianapolis lawyer, becomes minister to Austria-Hungary.

Mexico sends Manuel Aspiraz, a Liberal who has been assistant secretary of foreign relations, to Washington to succeed the late Matias Romero.

Samoan Complications. A flurry of disturbance in Samoa still occupies the attention of the three powers exercising joint control there, Great Britain, Germany, and the United States. Trouble arose over the succession to the throne held by the late king, Chief Justice Chambers, of the Samoan Supreme Court, having decided in favor of the claims of Malietoa Tanus. Followers of Mataafa attacked their rivals and burned the town of Upolu, and the three consuls appear to have recognized a kind of provisional government in Mataafa's interest, placing Dr. Joannes Raffel (German president of the municipality of Apia) at its head. Dr. Raffel is said to have closed the Supreme Court and assumed other powers, against which the British and American consuls protested to the extent

SENATOR CHARLES A. CULBERSON, OF TEXAS.

of replacing Chief Justice Chambers in his seat under the protection of British marines. The claim that the American chief justice joined in intrigues of English Protestant missionaries against the Roman Catholic Mataafa and other alleged complications, in particular the fining of a German resident for smashing windows of the Supreme Court chambers, do not appear to portend serious conflict in view of disclaimers upon the part of all three powers. In this connection, however, the efficacy of a joint protectorate is sharply questioned.

Senatorial Elections. Twenty-one state legislatures undertook the election of United States senators in January; at this writing deadlocks continue in six of them: California, Delaware, Nebraska, Pennsylvania, Utah, and Washington. The legislature of Florida will elect in April. In six states senators for the new term of six years beginning March 4 were chosen prior to January: Louis E. McComas (Rep.), to succeed A. P. Gorman (Dem.), from Maryland; reelections—William V. Sullivan (Dem.), of Mississippi; Marcus A. Hanna (Rep.), of Ohio; Nelson W. Aldrich (Rep.), of Rhode Island; Redfield Proctor (Rep.), of Vermont, and John W. Daniel (Dem.), of Virginia. January reelections included the following: Joseph R. Hawley (Rep.), of Connecticut; Eugene Hale (Rep.), of Maine; Henry Cabot Lodge (Rep.), of Massachusetts; Julius C. Burrows (Rep.), of Michigan; Cushman K. Davis (Rep.), of Minnesota; F. M. Cockrell (Dem.), of Missouri; William M. Stewart (Pop.), of Nevada; William B. Bate (Dem.), of Tennessee; Clarence D. Clark (Rep.), of Wyoming. New senators elected are: A. J. Beveridge (Rep.), to succeed David Turpie (Dem.), from Indiana; W. A. Clark (Dem.), to succeed Lee Mantle (Rep.), from Montana; John Kean (Rep.), to succeed James Smith (Dem.), from New Jersey; Chauncey M. Depew (Rep.), to succeed Edward Murphy (Dem.), from New York; Porter J. McCumber (Rep.), to succeed W. N. Roach (Dem.), from North Dakota; Charles A. Culberson (Dem.), in place of Roger Q. Mills (Dem.), from Texas; Nathan B. Scott (Rep.), to succeed Charles J. Faulkner (Dem.), from West Virginia; J. V. Quarles (Rep.), to succeed John L. Mitchell (Dem.), from Wisconsin. The returns received up to this time indicate a net Republican gain of six members and party control of the Senate, counting no Silver Republicans. Returns from six states are yet to be ...ed.

Legislation in Congress. Less than a month remained of the regular session of the Fifty-fifth Congress after the Senate ratified the peace treaty. By that time the House had passed nearly all the appropriation bills and a bill for the reorganization of the army. The Army Bill authorized the recruiting of 100,000 men, but gave the president discretion to reduce the army to a minimum of about 50,000 men. The nature of this bill gave opportunity for House debate on expansion and "imperialism"; it passed by a Republican majority of forty-three, practically a party vote. An amendment abolishing army canteens was passed without division. The Senate had passed the Morgan Bill for a Nicaragua Canal much amended. It provided for government directorship of the Maritime Canal Company, which should receive about $5,000,000 for its equity to date, the president, however, being empowered to negotiate for new concessions and treaties if necessary. As a substitute for this measure a House committee reported the Hepburn Bill providing for the

SENATOR CHAUNCEY M. DEPEW, OF NEW YORK.

purchase of territory direct and government construction of the canal at a cost not to exceed $115,000,000. Bills for subsidies to American shipping gained attention through committees of both houses, and bills to carry out the president's policy of greenback retirement and to affirm the establishment of a gold standard for the currency received the approval of Republican House committees.

In Great Britain and France. The British Parliament opened session on February 7, with the formal queen's speech, which dealt first with the "peaceful" foreign relations, and announcing acceptance of the invitation to take part in the czar's Peace Conference, now reported to have been called to meet in April. Among colonial affairs reference was made to the continuance of the plague in India; Cape Colony was congratulated on its vote for naval defense, and sympathy was expressed for sufferers by the disaster in the West Indies. Government proposals included bills for the municipal government of London and the promotion of secondary education. The Liberal, or opposition, party has chosen as leader to succeed Sir William Vernon Harcourt, Sir Henry Campbell-Bannerman, chief secretary for Ireland in 1884 and secretary of state for war in 1886 and 1892–95.

The Dreyfus case still overshadows France in ominous fashion. The criminal section of the Court of Cassation is said to have finished its investigation. While the investigation was in progress one of the judges, M. Quesnay de Beaurepaire, resigned and created something of a sensation by charging that the court showed a prejudice in personal courtesies to Colonel Picquart as witness. Thereafter it was proposed in the Chamber of Deputies that by legislation the case should be referred to the whole Court of Cassation after the criminal section completed its finding. This measure, however, was reported adversely by the committee to which it was referred. The next political twist to the affair can only be guessed.

Other Foreign Affairs. Oscar II., king of Sweden and Norway, has retired from affairs of state on account of ill health, and his eldest son, Crown Prince Gustavus Adolphus, becomes regent. King Oscar

OSCAR II., KING OF NORWAY AND SWEDEN.

has reigned since 1872, enjoying great confidence and esteem in all Scandinavia. He has been termed the most cultivated prince in Europe. His son, however, has dominant military instincts and his known views regarding force to settle differences between Sweden and Norway portend troubles.

Reports that a treaty of alliance had been signed between Russia and Afghanistan in spite of the protests of representatives of Great Britain, bring to mind the delicate international relations in Europe.

Australian federation, which recently failed because of opposition in New South Wales to proposed fiscal arrangements, has received new impetus, which promises ultimate success. The colonial premiers in conference at Melbourne, to whom disputed questions were referred, have reached a unanimous agreement. A federal capital or federal territory is to be established in New South Wales, distinct from the colonial capital, and the Parliament is to consist of a senate and house of representatives, an absolute majority of the members of both

houses being empowered to decide all differences that may arise between the two, an indication of concession by the less populous states.

Church Interests. The successor of Dr. Lyman Abbott in the famous pulpit of Plymouth Church, Brooklyn, is the Rev. Newell Dwight Hillis, who leaves Central Church, Chicago (in which he succeeded Rev. David Swing), to accept the new pastorate. Dr. Hillis is forty years of age; comes of Puritan stock transplanted to Iowa; was an American Sunday-school Union organizer at the age of nineteen; "worked his way" through Lake Forest University, Illinois, and McCormick Theological Seminary; was pastor of a Presbyterian church at Peoria for three years, and another at Evanston for four years, building fine churches in each place; and was serving his fourth year in the "liberal" Central Church of Chicago when called to Plymouth Church. Dr. Frank W. Gunsaulus of Plymouth Church, Chicago, succeeds Dr. Hillis at Central Church.

THE LATE NELSON DINGLEY.

Nelson Dingley. The death of Representative Nelson Dingley, January 13, at the age of sixty-six years, removed one of the wheel-horses of national legislation. He was speaker of the Maine House of Representatives 1863–64, and governor of the state 1874–75. He entered the House of Representatives in 1881 and continued in service thereafter, devoting much attention to shipping and fisheries, inaugurating the Bureau of Navigation and other changes of administration in the Treasury Department. He was a member of the Ways and Means Committee which framed the tariff of 1890, and when Mr. McKinley became president, he became chairman of the Ways and Means Committee, the Tariff Act of 1897, bearing his name in popular parlance. His successor as head of the committee is Sereno N. Payne of New York, who also takes Mr. Dingley's place as a member of the joint commission with Canada.

The Death List. Among the notables in foreign countries who have died since our last issue is Gen. George von Caprivi de Caprera de Montecuculi, Bismarck's successor as chancellor of the German Empire in 1890.

On January 14 occurred the death of Nubar Pacha, former president of the Egyptian Council of Ministers, to whom the establishment of the Mixed Tribunals was due.

The record of recent deaths in the United States includes the names of Col. James A. Sexton, of Illinois, commander-in-chief of the Grand Army of the Republic and a member of the War Investigating Commission, February 5, aged fifty-four; Rev. Dr. Charles S. Robinson, of New York City, most widely known by his church hymnals, "Laudes Domini," "Songs for the Sanctuary," and "Songs of the Church"; Augustus H. Garland, of Arkansas, United States senator in 1876 and attorney-general under President Cleveland; the Right Rev. John Williams, of Connecticut, senior member of the House of Bishops of the Protestant Episcopal Church of America, aged eighty-one years; Simon Pokagon, for twenty-two years chief of the Michigan band of Pottawattamie Indians, whose father signed the treaty of 1833 giving possession of the site of Chicago to white men. He died at the age of seventy-three.

C. L. S. C. OUTLINE AND PROGRAMS.

OUTLINE OF REQUIRED READING.

FOR MARCH.

First Week (ending March 4).

"From Chaucer to Tennyson." Chapter VI. to page 178.

"Men and Manners of the Eighteenth Century." Books VI. and VII.

In THE CHAUTAUQUAN:

"The Textile Industries of the United States."

Second Week (ending March 11).

"From Chaucer to Tennyson." Chapter VI. concluded.

"Men and Manners of the Eighteenth Century." Book VIII.

In THE CHAUTAUQUAN:

"The City of Manchester."

Third Week (ending March 18).

"From Chaucer to Tennyson." Chapter VII. to page 197.

"Men and Manners of the Eighteenth Century." Book IX.

In THE CHAUTAUQUAN:

"John Bright."

"The Liquor Interests in English Politics."

Fourth Week (ending March 25).

"From Chaucer to Tennyson." Chapter VII. to page 201.

"Men and Manners of the Eighteenth Century." Book X.

In THE CHAUTAUQUAN:

"The True Motive in the Christian Life."

"Recent Progress in Physical Science."

FOR APRIL.

First Week (ending April 1).

"From Chaucer to Tennyson." Chapter VII. to page 205.

"Walks and Talks in the Geological Field." Chapters I., II., III., IV., V., and VI.

In THE CHAUTAUQUAN:

"Women at the Great English Universities."

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FOR MARCH.

First Week.

1. The Lesson.
2. Essay—Pope's influence on English poetry.
3. A Paper—Sentimentalism in English fiction.
4. A Book Review—"The Vicar of Wakefield," by Goldsmith.
5. Readings—Selections from "The Traveler," by Goldsmith, and from "The Seasons," by Thomson.
6. General Discussion—"History as it is Made."

Second Week.

1. Roll-call—Each response to be a quotation from a favorite English author.
2. The Lesson.
3. Essay—The religious revival of the eighteenth century.
4. Readings from Cowper—"The Cricket," "The Diverting History of John Gilpin," "My Mother's Picture," and "The Rose."
5. A Critical Study—"The Task," by Cowper.
6. Select Readings—"To a Mountain Daisy," "Tam O'Shanter," and "The Cotter's Saturday Night," by Burns.

Third Week.

Wordsworth Day—March 17.

"Thine is a strain to read among the hills,
The old and full of voices;—by the source
Of some free stream, whose gladdening presence fills
The solitude with sound; for in its course
Even such is thy deep song, that seems a part
Of those high scenes, a fountain from their heart."
—*F. D. Hemans.*

1. Biographical Sketch—William Wordsworth.
2. A Paper—Wordsworth's style.
3. A Talk—Wordsworth's rank as a poet.
4. A Critical Study—"The Excursion."
5. Essay—Wordsworth's poetic motives.
6. Readings—"To a Cuckoo," "Daffodils," "To a Highland Girl," and "Lucy."

Fourth Week.

1. Roll-call—The responses to be quotations from Coleridge and Southey.
2. The Lesson.
3. A Paper—The electrical power at Niagara Falls.
4. A Literary Study—"Kubla Khan" and "Christabel," by Coleridge.
5. A Paper—Southey's art.
6. Readings—"Rime of the Ancient Mariner"

and "Love," by Coleridge. "Emmett's Epitaph" and "The Greenwood Shrift," by Southey, and "The Holly-Tree," by Robert and Caroline Southey.

FOR APRIL.

First Week.

1. Roll-call—Responses to be quotations from Lamb and De Quincey.
2. The Lesson.
3. A Critical Study—"Essays of Elia," by Charles Lamb.
4. Readings—Selections from "Essays of Elia."
5. Essay—Thomas De Quincey and his literary works.
6. A Paper—The local rocks.
7. A Geological Study—The local drift material and the hillside spring.

SYLLABUS OF C. L. S. C. READING.

REQUIRED READING IN THE TEXT-BOOKS.

"FROM CHAUCER TO TENNYSON."

VI.—FROM THE DEATH OF POPE TO THE FRENCH REVOLUTION, 1744–1789.

1. Pope's example (p. 163).
2. The romantic movement (pp. 163–170).
   (1) Poetry for a hundred years.
   (2) Thomson's "Seasons."
   (3) Akenside's work.
   (4) The movement on the Continent.
   (5) The movement in England.

"Tyrwhitt" [ter'it].

   (6) "Poems of Ossian" and their influence.
   (7) Chatterton and his work.
   (8) Change in the form of the verse.
   (9) Character of the romanticists and their poetry.
   (10) Critical expounders of the new school.

"*Seriatim.*" One after another; serially.

3. Samuel Johnson and his works (pp. 170–173).
   (1) Boswell's "Life of Johnson."
   (2) Biography.
   (3) His important works.
   (4) Literary style.
4. The English novel (pp. 173–179).
   (1) Richardson's works.
   (2) Fielding and his novels.
   (3) Smollett's writings.
   (4) Sterne and his works.

"Rabelais" [räb-e-lā']. A French humorist. He died in 1553.

   (5) General character of modern fiction.
5. Gibbon and Burke (p. 179).
6. William Cowper and his works (pp. 179–182).
   (1) Biographical facts.
   (2) "The Task."
   (3) "Table Talk."
   (4) Character of his poetry.
7. Robert Burns and his poetry (pp. 182–186).
   (1) Appearance of Burns' first volume.

"Ramsay." A poet of Scotland. He died in 1758.

"Ferguson." A Scottish poet of the eighteenth century.

   (2) Peasant life.
   (3) Love songs.
   (4) Drinking songs.
   (5) Satires.
   (6) Poet's reception in Edinburgh.
   (7) Life at Ellisland.
   (8) Reputation as a song-writer.
   (9) Motives of his songs.
   (10) Burns' politics.

REVIEW QUESTIONS.

1. In what works is the example of Pope very evident?
2. Give a sketch of the romantic movement and tell what works best show the literary tendency of the age.
3. What authors were influential in reviving the old forms of English verse?
4. What was the general character of the romanticists and their poetry?
5. Describe Samuel Johnson's works and tell some facts about his life.
6. Who were the greatest novelists of this period? What were the distinguishing characteristics of their works?
7. Give an estimate of Cowper's poetry and tell the principal facts about his life.
8. Give a biographical sketch of Robert Burns.
9. Give the titles of some of Burns' best poems and tell the motive of each.

SEARCH QUESTIONS.

1. Where did Cowper obtain the theme of "John Gilpin"?
2. What are the opening words of "The Task" and what explanation is given for them?
3. How long was Johnson occupied in writing "Rasselas" and for what was it written?

VII.—FROM THE FRENCH REVOLUTION TO THE DEATH OF SCOTT, 1789–1832.

1. General survey of the Georgian era (p. 187).
2. Journalism of the period (pp. 187–189).
   (1) London dailies.

(2) Reviews and magazines.

(3) The editors.

"Noctes Ambrosianæ" [nok'tēz ăm-brō-si-ā'nē]. Ambrosian nights.

(4) Contents of reviews and magazines.

3. Foreign influences (pp. 189–190).

(1) Impulse from Germany.

(2) Effect of the French Revolution.

4. The "Lake Poets" (pp. 190–201).

(1) The group.

"Pantisocracy." A community whose members have equal rank and authority; the government of all by all.

(2) Wordsworth and his productions.

(*a*) "Lyrical Ballads" and the innovations.

(*b*) Wordsworth's poetic diction.

(*c*) Opposition to sensationalism.

(*d*) His life and characteristics.

(*e*) "The Excursion" and "The Prelude."

(*f*) His delineation of nature.

(*g*) His mysticism.

"Spinoza." A German philosopher of the seventeenth century.

(3) Coleridge and his works.

(*a*) The introduction of German thought into England.

"Fichte" [fĭk'te].

(*b*) Traits of character.

"*Venturum expectat.*" Joined with what precedes it reads, "Alas! (for him who) expects what is about to come."

(*c*) Influence on thought.

(*d*) Religious and political doctrines.

(*e*) His poetry.

"Calenture." A delirious fever that was once believed to attack mariners, caused by exposure to heat, especially in the tropics.

(4) Southey's works.

REVIEW QUESTIONS.

1. Describe the literary activity of the Georgian era.

2. Give history of the periodicals published in the early part of the century.

3. Describe the influence of German thought and of the French Revolution on English literature.

4. Describe the characteristics of Wordsworth's poetry.

5. What were Coleridge's peculiarities and what was his influence on English thought?

6. Describe Coleridge's best known works.

7. Give an estimate of Southey's works.

SEARCH QUESTIONS.

1. What English poet enlisted in the dragoons under an assumed name to escape trouble at Cambridge? What was the name?

2. What poet characterized one of his own productions as "the best English poem since 'Paradise Lost'"?

"MEN AND MANNERS OF THE EIGHTEENTH CENTURY."

BOOK VI.—GOLDSMITH.

XVI.—GOLDSMITH'S LIFE.

1. Birth and parentage (p. 180).

2. Description of his first school-teacher (p. 180).

3. His arrival in London (p. 180).

4. Conditions in London (pp. 181–183).

(1) Political.

(2) Literary.

(3) London authors.

(4) The laureateship.

5. Life in London (pp. 183–186).

(1) Home and first work.

(2) His letter to a friend.

(3) Changed circumstances.

(4) Society life.

(5) His friends.

(6) Newberry's visit.

XVII.—CONTRIBUTIONS TO THE *Public Ledger*.

1. The "Chinese Letters" (pp. 187–189).

(1) The plan.

(2) Estimate of the number of books published.

(3) Capacity and liberty of the English.

(4) How a man becomes great.

"Lama" [lä'mä]. A celibate priest in the branch of Buddhism known as Lamaism.

(5) Number of great men.

2. Excerpt from "The Citizen of the World" (pp. 189–191).

(1) Method of rewarding bravery.

(2) Desire for distinction.

(3) The new books.

(4) Comparison of old and new books.

(5) Value of the press and the pulpit.

"Bonza." A Buddhist monk, particularly in Japan and China.

XVIII.—FACTS ABOUT GOLDSMITH'S LIFE AND WORKS.

1. Financial matters (p. 192).

2. Social life in London (p. 192).

3. The meeting with Johnson (pp. 192–193).

4. Intimate friends (pp. 193–194).

5. A financial difficulty (pp. 194–195).

6. The publication of two works (pp. 195–196).

7. Popularity of his novel (p. 196).

XIX.—SELECTIONS FROM A NOVEL AND BIOGRAPHICAL FACTS.

1. Excerpts from "The Vicar of Wakefield" (pp. 197–201).

(1) Description of the new home.

(2) Laws of the republic.

(3) The Sunday finery.

(4) Influence of the ladies of the town.

"*Soi-disant*" [swo-dē-zoN']. Self-styled; would-be.

(5) The family picture.

"Joseph." A garment resembling a man's coat,

generally having a broad cape and buttoning down the front.

2. Biographical facts (pp. 201–202).

(1) Financial straits.

(2) Last illness.

(3) His death and its effect on his friends.

(4) Burial and epitaph.

REVIEW QUESTIONS ON BOOK VI.

1. Give Goldsmith's description of his first school-teacher.

2. Describe the political and literary conditions existing in England in 1756.

3. Give a biographical sketch of Goldsmith.

4. What was his personal appearance at thirty-one as described by himself in a letter to a friend?

5. What do Goldsmith's "Chinese Letters" show in regard to literary activity and the customs of the time?

6. Describe English country life as delineated in "The Vicar of Wakefield."

SEARCH QUESTIONS.

1. What two comedies were written by Goldsmith?

2. Which work of Goldsmith's is extensively used in France and Germany for teaching English?

BOOK VII.—HORACE WALPOLE AND GRAY.

XX.—FACTS ABOUT WALPOLE.

1. His correspondence (p. 203).

2. Birth, parentage, and early life (p. 204).

3. Continental tour (p. 204).

4. Parliamentary career (p. 204).

5. Love of art and literature (p. 205).

6. The Twickenham villa (pp. 205–206).

7. Mode of living (p. 206).

8. Unpopularity (p. 207).

9. "Castle of Otranto" (p. 207).

XXI.—WALPOLE'S LETTERS.

1. To John Chute (pp. 208–209).

(1) Account of country manners.

(2) *Ennui* defined.

2. General character of his letters (p. 209).

3. Account of the sensation caused by an earthquake (pp. 209–211).

"Ridotto." A hall for public entertainments; a public entertainment consisting of music and dancing.

"Cedrati" [se-drä'ti]. A perfume obtained from the citron.

"Terreno." A terrene; terrine.

4. The Vauxhall frolic (pp. 211–212).

"Vauxhall" [vâks-hâl']. Vauxhall Gardens, a fashionable resort of London, were laid out in 1661 along the Thames. They were closed in 1859 and the site has since been built over.

"*Petite partie.*" Small party.

5. The royal marriage (pp. 212–213).

"Toupet" [too-pā']. A toupee; a small wig.

6. Entertaining French guests (pp. 213–214).

7. Entertainment at Richmond House (p. 214).

8. Duchess of Queenberry's ball (pp. 214–215).

9. About "Castle of Otranto."

10. A famous dinner (p. 216).

11. About the extravagance of the age (p. 217).

"Poussin" [poo-saN']. French historical and landscape painter of the seventeenth century.

"Mezzotinto." A mezzotint, an engraving from a copper plate so treated that it "prints impressions graded in light and shade according to the requirements of the design, from a rich velvety and perfectly uniform black up through every variation of tone to brilliant white, or showing, when desirable, the sharpest contrasts between the extremes."

"*Or moulu.*" French words meaning literally ground gold; ormolu, a fine grade of brass used in making jewelry, chandeliers, etc.; gilt or bronzed metallic ware.

"Antonines." Two Roman rulers the period of whose reigns has been termed the Age of the Antonines. It was characterized by domestic peace.

12. Attendance on Princess Amelia (pp. 218–219).

"*Al fresco.*" Italian for in the open air, out of doors.

XXII.—LETTERS AND INTERESTING FACTS.

1. Anecdote about Garrick and Goldsmith (p. 220).

2. The prophecy (p. 221).

3. The "Blue-stocking Club" (p. 221).

4. The country in 1782 (p. 221).

5. Opinions of Mrs. Siddons (pp. 221–222).

"*Ton.*" Air of fashion; fashionable people collectively.

"*Maniérée.*" French for affected.

6. Remarks on air balloons (p. 223).

7. About Dr. Burney and his daughter (p. 223).

8. Queen Charlotte's visit (pp. 223–224).

"*De la vieille cour.*" Of the old court.

9. His last letter (pp. 224–225).

10. Walpole's personal appearance (p. 225).

"*Chapeau bas.*" The hat off.

XXIII.—GRAY AND WALPOLE.

1. Gray's ways (p. 226).

2. Lady Cobham's acquaintance with Gray (pp. 226–227).

3. "The Long Story" (pp. 228–229).

4. The letter to Walpole (pp. 229–231).

"*Tempus inane peto,*" etc. I beg for leisure, quiet, and an interval from grief.

"*Fcue.*" The late.

5. Extract from "Castle of Otranto" (pp. 231–232).

REVIEW QUESTIONS ON BOOK VII.

1. What is the character and extent of Horace Walpole's correspondence?

2. Give a biographical sketch of Walpole and describe the villa at Twickenham.

3. Describe country manners as delineated in his letters.

4. What do his letters show in regard to city and court life?

5. What does he say in regard to the extravagant tendencies of the time?

6. Give Walpole's impressions of Mrs. Siddons.

7. Explain how Lady Cobham and her niece became acquainted with Thomas Gray.

8. Describe his portrayal of them in "The Long Story."

9. What letter shows the playful spirit of Gray? Give a *résumé* of its contents.

10. Give a *résumé* of the extract from "Castle of Otranto."

SEARCH QUESTIONS.

1. What is the title of Walpole's great tragedy?

2. What does Macaulay say is the irresistible charm of Walpole's writings?

BOOK VIII.—EVELINA AND DR. JOHNSON.

XXIV.—EVELINA INTRODUCED TO LONDON SOCIETY.

1. Evelina's account of the theater (pp. 233–234).

2. Preparation for a ball (p. 234).

3. Description of the ball (pp. 235–239).

(1) The company.

(2) Manners of the gentlemen.

(3) Lovel's invitation to dance.

(4) Evelina's diffidence.

(5) Her rudeness and the result.

(6) Lovel's second appearance.

(7) A second dance.

XXV.—EVELINA'S EXPERIENCES IN LONDON.

1. Her London relatives (p. 240).

2. Their invitation (pp. 240–242).

3. At the opera (pp. 242–243).

4. Evelina and the cousins at Marylebone Gardens (p. 244).

"Marylebone" [mă'ri-le-bŏn]. At Marylebone Gardens public entertainments were formerly held. The site is now covered by Beaumont Street and a portion of Devonshire Place.

"Pepys" [peps, pips, or pep'is]. An English politician whose "Diary" is one of the chief sources of information on the Restoration.

"Dick Turpin." A notorious highwayman.

5. A visit to Piccadilly (pp. 244–247).

"*Ma foi.*" My faith.

(1) Young Brangton's actions.

(2) A storm.

(3) Conversation in a shop.

(4) Use of Lord Orville's carriage.

(5) The Snow Hill incident.

"Mohocks." Ruffians who were very troublesome in London about the beginning of the eighteenth century. They took their name from the Indian tribe Mohawks, or Mohocks. It is said that some of the Mohocks were members of the higher classes of society.

6. Disappearance of the Brangtons (p. 247).

7. Evelina's antecedents (pp. 247–248).

XXVI.—EVELINA AWAY FROM LONDON.

1. A letter from her guardian (p. 249).

2. Evelina's letter to Miss Mirvan (pp. 249–251).

3. An interview with Mr. Villers (pp. 251–253).

4. Evelina at Bristol Hot-wells with Mrs. Selwyn (pp. 253–255).

(1) Reason for the visit.

(2) Meets Lord Orville.

(3) In Mrs. Beaumont's garden.

5. Connecting links of the story (pp. 255–256).

6. The conclusion of the story (pp. 256–260).

XXVII.—FANNY BURNEY AND JOHNSON.

1. Facts about Miss Burney's life (pp. 261–268).

(1) Record in her diary.

(2) Childhood home.

(3) Burning her manuscripts.

"*Auto de fe*" [ou'to dă fā]. The public announcement of the sentences passed by the court of the Spanish Inquisition and the execution of these sentences. "It was celebrated with great pomp and solemnity, and was attended with the procession of the condemned to a public place and the delivery of a sermon, followed by the execution by the secular authorities of the various sentences imposed, including the burning at the stake of those adjudged 'incorrigible and impenitent heretics.'"

(4) Her imagination.

(5) Assisting her father.

(6) Publication of her story.

(7) Mrs. Thrale's approbation.

"*Éloge*" [ā-lozh']. Panegyric; eulogy.

(8) A visit to Streatham.

(9) Comments on her book.

2. Facts about Dr. Johnson (pp. 268–270).

(1) Relation to the Thrales.

(2) His habits.

(3) Peculiarities.

(4) Treatment in the Thrale family.

(5) His writings.

REVIEW QUESTIONS ON BOOK VIII.

1. Give an outline of the story of Evelina.

2. Describe the style of the novel.

3. Describe the picture it gives of the people and manners of the period.

4. Give a biographical sketch of the author.

5. What were the opinions of the public on this novel?

6. What does Miss Burney's diary say of Dr. Johnson?

SEARCH QUESTIONS.

1. What official position did Miss Burney hold?

2. What did Garrick play at his first appearance in London? Where is he buried?

BOOK IX.—BEAU NASH AND BATH.

XXVIII.—A PARTIAL HISTORY OF BATH AND NASH.

1. Importance of Bath in the eighteenth century (p. 271).
2. Baedeker's account of Bath (pp. 271–272).
3. Goldsmith's account of Nash (pp. 272–274).
   (1) Statement of his purpose.
   (2) Nash's family.

"Gil Blas" [zhēl bläs]. A romance by Le Sage in which the hero Gil Blas tells the story of his life.

   (3) His education.
   (4) A member of Middle Temple.

"Inns of Court." Colleges in which students of law live and pursue their studies. They are four in number, Inner Temple, Middle Temple, Lincoln's Inn, and Gray's Inn.

   (5) He conducts a pageant.

"*Arbiter elegantiarum*" [el-e-gan-shi-ā'rum]. Judge of the elegancies; authority in matters of taste.

   (6) Character of Nash.
   (7) Gaming in London.
4. Conditions at Bath (pp. 274–275).
5. Changes made by Nash (pp. 275–276).

XXIX.—MORE ABOUT BATH AND NASH.

1. A day at Bath (pp. 277–280).
   (1) Reception of strangers.
   (2) Subscriptions.
   (3) Bathing.
   (4) Breakfast and dinner.
   (5) Evening pleasures.
   (6) Nash's display.
2. Prevalence of gambling (p. 280).
3. Nash's old age and death (pp. 280–281).

"Nestor." The oldest councilor of the Greeks before Troy; the oldest and most experienced one of a company.

4. Tunbridge Wells (p. 281).

XXX.—MANNERS AT BATH.

1. Arabella's arrival at Bath (p. 282).
2. Arabella in the pump-room (pp. 282–283).
3. The new costume (pp. 283–284).
4. Arabella's departure (p. 284).

XXXI.—VARIOUS REPORTS OF BATH.

1. Extract from "Pompey" (pp. 285–286).
   (1) A fine gentleman described.
   (2) Conversation about Bath.
2. Smollett's account in "Humphrey Clinker" (pp. 287–290).
   (1) The round of gaities.
   (2) The bathing.
   (3) The coffee-house.
   (4) Spring Gardens.
   (5) The ball.
3. Evelina's account (pp. 290–291).
4. Opinion of Walpole and Miss Austen's account (p. 291).

REVIEW QUESTIONS ON BOOK IX.

1. What does Baedeker's "Great Britain" say about Bath?
2. Give a sketch of Nash as portrayed by Goldsmith.
3. Describe the scene at the pump-room.
4. Describe the manner of passing the time at Bath.

SEARCH QUESTIONS.

1. What sobriquet was bestowed upon Richard Nash?
2. When was Goldsmith's "Life of Richard Nash" published?

BOOK X.—MRS. RADCLIFFE AND HER FOLLOWERS.

XXXII.—MRS. RADCLIFFE AND HER WORKS.

1. General character of her works (p. 292).
2. Biographical facts (p. 292).
3. Her principal works (pp. 292–293).
4. Peculiarities of her works and their influence (p. 293).
5. Her methods (pp. 293-294).
6. "The Mysteries of Udolpho" (pp. 294–300).
   (1) Length and characters.
   (2) Opening of the story.
   (3) In the Apennines.
   (4) Arrival at Udolpho.
   (5) Emily's chamber.
   (6) Her first night at Udolpho.
   (7) Arrangement of her room.
   (8) Exploration of the castle.

XXXIII.—THE WORK OF REGINA MARIA ROCHE.

1. "The Children of the Abbey" (pp. 301–309).
   (1) Its style and character.
   (2) The opening.
   (3) The abbey.
   (4) Description of two portraits.
   (5) Malvina's marriage.
   (6) Description of a lord.
   (7) Amanda's flight and a change of scene.
   (8) Amanda at a ball.
   (9) Attitude of Lord Mortimer.
   (10) The London incident.
   (11) The villains.
   (12) Description of the abbey.
   (13) The portraits.
   (14) Amanda discovers a relative.
   (15) Conclusion of the story.

XXXIV.—"THE HEROINE, OR CHERUBINA."

1. Facts about the author (p. 310).

"*L' histoire d' une femme est toujours un roman.*" The history of a woman is always a romance.

2. A description of the heroine (pp. 310–311).
3. The beginning of the book (pp. 311–312).
4. Description of an ancient chamber (pp. 312–313).
5. Appearance of Baron Hildebrand (p. 313).
6. Interview with the baron (pp. 313–314).
7. A visit from celebrated people (pp. 314–315).

8. Miss Porter's play (p. 315).
9. Character of the castle (p. 315).
10. Conclusion of the tale (pp. 315–316).

XXXV.—JANE AUSTEN AND HER BURLESQUE.

1. Facts about the book and the author (pp. 317–318).
2. The heroine and the scene of the story (p. 318).
3. Conversation in the pump-house (p. 318).
4. Mr. Tilney and the ride to his home (p. 319).
5. Incidents at the abbey (pp. 319–324).
   (1) Catherine's first impression.
   (2) Her first night there.
   (3) Revelations of the morning.
   (4) Verifying a mystery.
   (5) The conclusion.

REVIEW QUESTIONS ON BOOK X.

1. What were the chief characteristics of Mrs. Radcliffe's work?
2. Give an outline of "The Mysteries of Udolpho" and describe the castle.
3. Give an outline of "The Children of the Abbey" and its picture of the manners of the period.
4. Tell the story of "Cherubina" and describe the heroine.
5. Give an outline of Jane Austen's burlesque.

SEARCH QUESTIONS.

1. To what rank of society do most of Jane Austen's characters belong?
2. What has Sir Walter Scott said of Jane Austen, Edgeworth, and Ferrier?

REQUIRED READING IN "THE CHAUTAUQUAN."

I.—"THE CITY OF MANCHESTER."

1. History before the Conquest (p. 531).
2. The present city (pp. 531–532).
3. The beginning of the textile industry (pp. 532–533).
4. Political conditions (p. 533).
5. The cotton famine (pp. 533–534).
6. Manufacturing interests (p. 534).
7. Architecture and public squares (pp. 534–537).
   (1) Criticisms.

"Haussmann" [ōs'mān]. A Frenchman of the present century who was prominent in the civil service. Through his efforts the sanitation of Paris was greatly improved and the city beautified.

   (2) The town hall.
   (3) Albert Square.
   (4) Royal Infirmary.
   (5) The art gallery.
   (6) Owens College.
   (7) The assize courts.
   (8) The Manchester Royal.
   (9) The cathedral.
   (10) Chetham Hospital.
   (11) Other buildings.
8. The ship canal (p. 537).
9. The corporation's work (p. 537).

II.—"THE TEXTILE INDUSTRIES OF THE UNITED STATES."

1. Conditions of textile industries (p. 538).
2. Geographical distribution (p. 538).
3. The woolen industry (pp. 538–539).
   (1) Compared with other industries.
   (2) The center.
   (3) Character of the manufactures.
   (4) Disadvantages.
   (5) The frauds.
4. The cotton industry (pp. 539–540).
   (1) Consumption of cotton.
   (2) Character of the goods.
   (3) The market.
   (4) Statistics.
   (5) Development of the industry.
   (6) Mercerized goods.
5. The silk industry (pp. 540-541).

III.—"JOHN BRIGHT."

1. Bright's influence (p. 541).
2. Facts of his life (p. 541).
3. Cause of his political sympathies (pp. 541–542).
4. Beginning of his political work (p. 542).
5. Partnership of Bright and Cobden (p. 542).
6. The corn laws (p. 542).
7. The repeal movement (pp. 542–543).
8. The Reform Acts (p. 543).
9. Opposition to Palmerston (p. 543).
10. Attitude toward continental liberalism (p. 544).
11. Influence on English politics (p. 544).
12. Bright as an orator (p. 544).
13. Bright's attitude toward the Civil War (pp. 544–545).

IV.—"THE TRUE MOTIVE IN THE CHRISTIAN LIFE."

1. The text illustrated (p. 545).
2. The true motive in the Christian life (pp. 545–546).
   (1) The motive in obedience.
   (2) The religion of the Old Testament.
   (3) The heathen religions.
3. Christ's revelation of God (pp. 546–548).
   (1) Paul's need.
   (2) What the incarnation does.
   (3) Christ's humanity.
   (4) An offering for sin.
   (5) The great picture.
4. Influence of love (pp. 548–549).
   (1) On the early Christians.
   (2) In personal devotion.
   (3) In our relation to Christ.
   (4) On faith.
   (5) In true religion.
   (6) In the religious life.

V.—"RECENT PROGRESS IN PHYSICAL SCIENCE."

1. Progress of science during the nineteenth century (p. 550).

2. What the author purposes to set forth in the article (p. 550).

3. The discovery of new atmospheric elements (pp. 550–552).

(1) Statement by Sir William Crookes.

"Protyle" [pro-tĭ'le]. A hypothetical substance from which all other substances are supposed to have been derived.

(2) Lord Rayleigh's discovery.

(3) Experiments and discoveries.

(4) Separation of argon.

(5) Liquefaction of gases.

"Cailletet" [kä-ya-tā'].

"Pictet" [pēk-tā' or pē-tā'].

(6) Separation and identification of elementary gases.

4. Hypothetical elements (pp. 552–553).

5. Röntgen rays (p. 553).

6. The Hertzian waves (p. 553).

7. Progress in electricity (p. 553).

8. Progress in electro-chemistry (pp. 553–554).

9. Improvements in the soda industry (p. 554).

10. The object of science (p. 554).

VI.—"THE LIQUOR INTERESTS IN ENGLISH POLITICS."

1. Facts to be studied (p. 554).

2. The licensing system (pp. 554–556).

(1) Granters of licenses.

(2) The magisterial benches.

(3) System from 1830 to 1869.

(4) Policy since 1870.

(5) Effect of the restriction policy.

3. Development of the brewing industry (pp. 556–557).

(1) The business in 1869.

(2) Present conditions.

(3) Value of a license.

(4) Relation of license-holder to brewer.

(5) Effect of the changes.

4. Liquor interests in Parliament (pp. 557–558).

(1) The last reform.

(2) General attitude of the Liberals.

(3) The local option bill.

(4) Influence of the Tories.

(5) The proposals of 1888.

(6) Liquor interest allied to the Tories.

(7) The royal commission.

5. Two important license problems (p. 558).

6. The trade in politics (p. 558).

ANSWERS TO SEARCH QUESTIONS IN "THE CHAUTAUQUAN" FOR FEBRUARY.

"FROM CHAUCER TO TENNYSON."

II.

1. About thirty years in Germany. 2. The "Shepherd's Calendar" and "Mother Hubbard's Tale."

III.

1. Sir Philip Sidney. 2. Philip Massinger.

IV.

1. Jeremy Taylor. 2. Of Milton's prose writings by Macaulay.

V.

1. Dryden. 2. Dean Swift; one day in the latter part of his life after looking over "The Tale of a Tub."

"MEN AND MANNERS OF THE EIGHTEENTH CENTURY."

Book II.

1. Lieutenant-Governor Ramsay, of colonial New York. 2. "Shakespeare Illustrated." A collection of the tales on which Shakespeare's plays are founded.

Book III.

1. As a writer of Latin verse. 2. "Rural Sports."

Book IV.

1. Composing letters to their lovers. 2. Fifty-one.

Book V.

1. *The Champion.* 2. "It was, perhaps, the only book of which, being printed off betimes one morning, a new edition was called for before night."

THE C. L. S. C. CLASSES.

1882–1902.

CLASS OF 1899.—"THE PATRIOTS."

"*Fidelity, Fraternity.*"

OFFICERS.

President—John C. Martin, New York, N. Y.

Vice Presidents—John A. Travis, Washington, D. C.; Charles Barnard, New York, N. Y.; Rev. Cyrus B. Hatch, Pa.; Frank G. Carpenter, Washington, D. C.; John Brown, Chicago, Ill.; Charles A. Carlisle, South Bend, Ind.; Edward Marsden, Alaska; William Ashton, Uxbridge, England; Miss Alice Haworth, Osaka, Japan; Miss Frances O. Wilson, Tientsin, China.

Secretary—Miss Isabelle T. Smart, Brielle, N. J.

Treasurer—John C. Whitford, Detroit, Mich.

Trustee—Miss M. A. Bortle, Mansfield, O.

CLASS EMBLEM—THE FLAG.

CLASS COLOR—BLUE.

CLASS FLOWER—THE FERN.

Two missionary members of the Class of '99 send the following words of greeting from their far-away home in Canton, China:

"We are deeply interested in the present year's course and shall be sorry when it is finished, but we look forward to work on some of the seal courses or special work after this year. I cannot express to you the great benefit we have derived from our C. L. S. C. reading. Many a weary ride in sedan chair or boat has been brightened by the presence of these books, and they have served to keep us out of the groove that many drop into out here. May the good work of the C. L. S. C. prosper."

CLASS OF 1900.—"THE NINETEENTH CENTURY CLASS."

"Faith in the God of truth; hope for the unfolding centuries; charity toward all endeavor."

"Licht, Liebe, Leben."

OFFICERS.

President—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

Vice Presidents—Rev. John A. McKamy, Nashville, Tenn.; Rev. Duncan Cameron, N. Tonawanda, N.Y.; J. F. Hunt, Chautauqua, N. Y.; Morris A. Greene, Pittsburg, Pa.; Mrs. Mary H. Gardner, Kansas City, Mo.; Mrs. James H. Bentley, Ridley Park, Pa.

Secretary and Treasurer—Miss Mabel Campbell, 53 Younglove Ave., Cohoes, N. Y.

Trustee—Dr. Nathaniel I. Rubinkam, Chicago, Ill.

CLASS EMBLEM—EVERGREEN.

CLASS COLOR—GRAY.

CLASS OF 1901.—"THE TWENTIETH CENTURY CLASS."

"Light, Love, Life."

OFFICERS.

President—Dr. W. S. Bainbridge, New York, N. Y.

Vice Presidents—William H. Mosely, New Haven, Conn.; Rev. George S. Duncan, Washington, D. C.; John Sinclair, New York, N. Y.; Mrs. Samuel George, Wellsville, W. Va.; Dr. Eliza Mosher, Ann Arbor, Mich.; Mrs. T. S. Coleman, San Antonio, Tex.; Mrs. Miller, Jacksonville, Fla.

Executive Committee—Mrs. Ned Arden Flood, Chicago, Ill.; Prof. Henry Cohn, Evanston, Ill.; Mrs. Jamison.

Secretary and Treasurer—Miss Harriet E. Barse, 1301 Brooklyn Ave., Kansas City, Mo.

CLASS FLOWER—COREOPSIS.

CLASS EMBLEM—THE PALM.

CLASS OF 1902.—"THE ALTRURIANS."

"Not for self, but for all."

OFFICERS.

President—Dr. John Henry Barrows, Chicago, Ill.

Vice Presidents—Col. Geo. W. Bain, Lexington, Ky.; Mr. A. T. Van Laer, New York, N. Y.; Mr. J. T. Robert, Chicago, Ill.; Mr. M E. Baird, Ohio; Madame Emma D. Rupin, St. Louis, Mo.; Miss Harriet Walker, Wellesley College; Mr. Albert Watson, Mt. Vernon, Ill.; Miss Sallie Leonard, Jackson, Mich.; Miss Jewell Gould, Aspen, Col.; Miss Belle Kearney, Flora, Miss.

Honorable Vice Presidents—The Earl and Countess of Aberdeen.

Secretary—Mrs. Josephine Griffith Rabb, East Aurora, N. Y.

Treasurer—Prof. J. C. Armstrong, 530 Lincoln Ave., Pittsburg, Pa.

CLASS FLOWER—AMERICAN BEAUTY ROSE.

TO MEMBERS OF THE CLASS OF 1902:

Dear Classmates:—I have received a number of communications concerning class finances, class pins, lists of names and addresses, etc., and as it is impossible for me to write each member of the class a personal letter, I have prepared a brief statement for publication in THE CHAUTAUQUAN.

I was furnished a complete list of the names and addresses of all members of the Class of 1902 who joined at Chautauqua, and was instructed by the class to have these names and addresses printed and send a copy to each member of the class. This order I have not obeyed, because I am informed that it is contrary to the custom of the C. L. S. C. classes, as well as the wishes of the general C. L. S. C. officers. I am sure that the Class of 1902 desires to work in perfect harmony with the general officers.

In regard to finances, it is proper to say that each class is expected to contribute a fixed amount as its share toward the completion and furnishing of the class building. The class building is a frame structure containing eight rooms and a banquet hall, and is designed as a place for classes to hold their business and social meetings—in fact, it is our Chautauqua class home. The trustees inform me that the amount required of 1902 is $350. They have assigned us Room 2 on the first floor, and they have agreed to finish it nicely for us upon the payment of $150. The work of finishing the room has been contracted for and is now nearly completed. I have received a request from the treasurer of the board of trustees to remit the amount required for finishing our room. As will be seen from the following report I am unable to comply with his request:

The total of the subscriptions to the class fund to date is $187.50, $50 of which is a special contribution for a mantel and fireplace. Of this amount $130 has been paid. It will thus be seen that we have only $80 available to pay a debt of $150 now due. No specified amount is required from members, but as it is the Chautauqua home of the Class of 1902, we are sure that all will wish to do something toward setting it in order.

The class took some action late last season in regard to class pins, but my information in regard to what was done is not definite enough to enable me to inform members as to prices, how and where to obtain them, etc. It is probably better to defer the purchase of pins until next season.

I am sure that every earnest reader of the course for this year must find both pleasure and profit in it. Inspired by the number of our class and the presence and leadership of so many illustrious men and women, we should all feel it to be a great privilege to belong to the Class of 1902.

With best wishes for the members of the Class of 1902, I am, Very respectfully yours,

J. C. ARMSTRONG.

Pittsburg, Pa., January 16, 1899.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God." *"Let us Keep our Heavenly Father in the Midst."*
"Never be Discouraged."

C. L. S. C. MEMORIAL DAYS.

OPENING DAY—October 1.
BRYANT DAY—November 3.
SPECIAL SUNDAY—November, second Sunday.
MILTON DAY—December 9.
COLLEGE DAY—January, last Thursday.
LANIER DAY—February 3.
SPECIAL SUNDAY—February, second Sunday.
LONGFELLOW DAY—February 27.
SHAKESPEARE DAY—April 23.
ADDISON DAY—May 1.
SPECIAL SUNDAY—May, second Sunday.
SPECIAL SUNDAY—July, second Sunday.
INAUGURATION DAY—August, first Saturday after first Tuesday
ST. PAUL'S DAY—August, second Saturday after first Tuesday
RECOGNITION DAY—August, third Wednesday after first Tuesday.

SPECIAL MEMORIAL DAYS FOR 1898–99.

ALFRED DAY—October 18.
CAVOUR DAY—November 15.
CROMWELL DAY—December 16.
GLADSTONE DAY—January 14.
DRYDEN DAY—February 18.
WORDSWORTH DAY—March 17.
SHELLEY DAY—April 20.
TENNYSON DAY—May 18.

NEW CIRCLES.

NEW YORK.—Early in January an urgent request for the Chautauqua literature was sent from New York City with fees for eleven students who are to take up the course, although it is late in the year.——"We enjoy every meeting better and better, and would not give up the course for anything else." This is the testimony of a member of Binghamton Circle.

NEW JERSEY.—A letter recently received from Woodbury states that a membership of fifteen makes up the excellent organization at that place.

PENNSYLVANIA.—Seventeen active and five associate members in Girardville are making the most of their opportunities for study.

MARYLAND.—A new member has joined the readers at Baltimore.

ARKANSAS.—The following extract is from a letter written by the efficient secretary of the circle at Searcy: "The Self Culture Club, as our organization is called, has just this year taken up the Chautauqua work. We have seventeen members enrolled, and although most of the members are housekeepers, while several are school-teachers, we always have a good attendance. I read the course alone last year, but find it much more pleasant and profitable to read with a club. Our club is composed entirely of ladies and meets once a week. We have, so far, followed very closely the programs in THE CHAUTAUQUAN, and the papers and talks add a great deal of interest to the review of the week's reading."

ILLINOIS.—A circle of seven members at Mt. Carroll have been reading the course since October.

IOWA.—Mention is made in the *Knoxville Journal* of a circle organized in that community early in January with a large membership of ladies.

MISSOURI.—A fine circle at Kansas City has just launched out on the course, and we predict for them a successful year.

NEBRASKA.—The important step of enrollment has been taken by five earnest people at Burwell, and more are expected to join the circle in the near future.

COLORADO.—Columbian Circle, of Denver, enrolls with twelve members.

NEW MEXICO.—At San Marcial a circle of ten have made a good start.

OLD CIRCLES.

CANADA.—A few additional names have been added to the circle at Hamilton, making a membership of twenty-one.

HAWAII.—The Chautauquans at Honolulu send in their annual fees, and the secretary expresses the conviction that the latter half of the year will be even more satisfactory than the first half.

MAINE.—The secretary of Greenville Circle writes: "I wish to report the reorganization of North Star Circle of Greenville. Meetings have not been held since '93, but we reorganized October 24th of this year with seven regular members, including three post-graduates and twelve local members. Although beginning a month later than we should have done, we have made up nearly all the work to date, and have very interesting meetings. Although disappointed at first at not finding the *Questions and Answers* in THE CHAUTAUQUAN, we have found that our work is much more thoroughly done by the topics—and, of course, much more satisfactory."

VERMONT.—A report which comes from Burlington shows a class of twenty-five freshmen, sophomores, and juniors.

CONNECTICUT.—Addison Moore Circle, New Haven, is active in C. L. S. C. work. One new name has been added to their number.

NEW YORK.—The Long Island Society of the Hall in the Grove is an organization of great importance to the C. L. S. C. The members are progressive, energetic, and always loyal to their *alma mater*. A successful banquet, held in Brooklyn, is reported in the following: "The Long Island Society of the Hall in the Grove gave its fourth annual banquet at the Hotel St. George November 14. The tables in the large dining-room were handsomely decorated with pink roses and tiny silver candelabras. About fifty covers were laid. The Rev. Dr. R. S. Pardington acted as toast-master, and toasts were responded to by Dr. Hurlbut, national principal of the Chautauqua Literary and Scientific Circle, who confined his remarks to the national circle; Mrs. Cynthia Westover Alden responded to the toast, 'The Press,' and Benjamin J. Brenton, for twelve years president of the Jamaica Circle, spoke about the local work. Miss Cordelia Adele Teal, the corresponding secretary, read letters of regret from Miss Kate F. Kimball and Rev. Dr. Lyman Abbott. Miss Teal also announced the death of two members who had passed away during the year—Mrs. A. S. Higgins and Mrs. Helen Lafflin. Among the members and guests present at the dinner were Dr. Jesse L. Hurlbut and Mrs. Hurlbut, Mrs. Cynthia Westover Alden, Dr. and Mrs. Pardington, Mr. and Mrs. Harvey J. Warner, Mrs. Florence M. Harris, Mrs. Annie C. Kirby, Mrs. Timothy M. Griffling, and Miss Jennie Pomerene." In response to the toast to "The Press," Mrs. C. W. Alden spoke as follows: "If you people who are all the while trying to learn about things had lived in Egypt in the days of the early Pharaohs, you would all have been either priests or outlaws. It's a far cry from Isis to Sorosis, and from Osiris to original research. The priests ran a knowledge trust, which brooked no competition. Nobody knew how much they knew. Nobody knows yet. We have changed all that. The credit of popularizing knowledge is to be divided among the press, the schools and colleges, and the 'Chautauqua,' the most popular of all. I have ventured to put the contrast between the past and the present into somewhat informal verse, under the title of

CIVILIZATION'S TWIN FORCES.

I.

If those priestly old Egyptians
Had a fit of the conniptions,
When the pyramid inscriptions
Some one threatened to translate;
'Twas because to use a derrick,
In that dryness atmospheric,
Called for knowledge esoteric,
Which no boor could simulate;
And the people didn't mind it;
As for wisdom they resigned it,
'Hide it quickly when you find it'
Was the plan for each idea;
So the priest was the physician,
Linguist, architect, optician—
Maybe also electrician—
For the country far and near.

II.

'Tis the everlasting glory
Of our Anglo-Saxon story,
As we tell it, *con amore*,
In this Empire of the West,
That no *class* can *now* inherit
All the shrewdness, all the merit;
Every GAMIN is a ferret,
Burrowing deep, in learning's quest.
And I think I can convince you
That the paper Progress prints you,
Well supplying all the hints you
Need about the recent past—
Saying often just what you've meant,
Stirring you with every movement,
Stands for *half* in this improvement,
Since old Egypt bowed to caste.

III.

Only half? Well, education
Much concerns a growing nation,
And you lack in penetration
If my thought you cannot guess:
Schools and colleges aggressive,
Foes to all that is oppressive,
Supplement the most progressive
Spirit of the daily press.
Should Minerva's self appearing
Seek the truest persevering
Agency that is endearing
Learning to all earnest folk,
I should not, I hope, be backward,
Though an introduction's awkward,
To direct her steps Chautauquard,
Toward the lake, to take a look.

IV.

There, unless I'm much mistaken,
She would feel her memories waken
Of Olympus, late forsaken,
That Olympus of the Greek,
Where the goddesses of fiction,
Full of mutual contradiction,
Full of jealousy and friction,
Vented each her private pique—
Wisdom-loving, folly-scorning,
E'en bad company adorning,
She would find the earth's fair morning
In this spring of ancient lore;
She would say: 'It is a pity
Not to aid the truly gritty,
I will take a cottage pretty,
And will leave it nevermore.'"

——The wide-awake Chautauquans at Canandaigua are doing conscientious work.——A good working member from Rochester writes rather discouragingly of her efforts in the C. L. S. C., but is hopeful for better times in the near future.

NEW JERSEY.—Vineland has the good fortune to contain two circles, the regular circle of twenty members and the Hall in the Grove Circle, with ten members. The two circles meet together the

first Friday of each month, while the regular circle holds weekly meetings besides.

PENNSYLVANIA. — Through a local paper of Lebanon glowing reports of the meetings of the Twentieth Century Circle are made public, and from the nature of the programs carried out this class is a credit to Chautauqua. At one of the semi-monthly meetings, held at the home of Mrs. Weiss, the following subjects were discussed: Michael Angelo and his work; reminiscences of the city on the Tiber; the art galleries of Dresden, Munich, and Vienna; the Italian lakes; European hotels and their customs; the monarchs of Spain during this century; the great value of earnestness and determination in study; Florence, the patron of art; the churches and catacombs of Rome; underground in Paris; and the Passion Play as it was seen at Ober-Ammergau. At the following meeting, held at the residence of Miss Sallie Kalbach, a paper on Ireland, written by Mrs. Weiss, was "marked by Mrs. Weiss' keen analysis and the power of grasping and interestingly presenting the pivotal points of her subject." Next followed the first of a series of readings and talks on "The Nibelungen Ring." The operas selected were "Das Rheingold" and "Die Walküre." Any one who has made a study of the Nibelungenlied will know how interesting this subject was. This discussion was followed by conversation regarding the problem of the Philippines, music, memory methods, the practical side of culinary art, and the cramping tendency of inaction.——The following is received from Pittsburg: "We have changed our name to 'Carlyle Circle' ('Light-bearers' last year), and have taken a motto from one of his works, 'Do the duty that lieth nearest thee.' We have eleven in our circle, nine old members and two new ones. We hold our meetings every other Saturday evening at the homes of the members; each member responds to roll-call with a quotation from one of the poets. We have two papers read at each meeting on some subject in connection with our reading, and a general discussion on the books. We are keeping right along with the required amount of reading and enjoying the English year very much."——The Marion Square Circle, Gladwyne, has reorganized for the second year's work.

ARKANSAS.—At Corning the circle has several seniors working for their diplomas.

OHIO.—Two ladies have joined the Worthingtons of Springfield.——Two 1900's of Howenstine are enrolled for this year.——Thirteen membership fees are received from Lima.

MICHIGAN.—The circle at Benton Harbor recently entertained the literary clubs of their own city and St. Joseph in a manner truly Chautauquan. Concerning the occasion a local paper says: "The ladies of the Chautauqua Literary and Scientific Circle very happily entertained the members of the literary clubs of the two cities and escorts at the home of Mr. O. B. Hipp, on Colfax Avenue, Monday afternoon and evening. About three hundred attended. The decorations were in the midwinter evergreen and holly, woven into garlands and wreaths, interspersed with meteor roses and red carnations. The door attendant was Master Lawrence Valentine, dressed in colonial style. The guests were received by Miss Whitehead in the reception hall; in the parlor by the president, Mrs. F. M. Kerry, assisted by Mesdames Ward, Wallace, Hendrix, Drake, Hipp, Dunning, and Valentine. The library was transformed into a bower of evergreen, where coffee was poured by the Misses Vincent and Hull, assisted by Mesdames Burwell and Newland. The dining-room was presided over by Mrs. Shauman and a bevy of young girls for assistants. Presided over by Miss Morgan was a big punch bowl in a bower of lace. Potted palms and ferns and sprigs of holly were placed in the different rooms. Over the dining-room door was placed the initials of the entertaining club, 'C.L.S.C.,' and beneath was hung the portrait of Dr. J. H. Vincent, the founder of the Chautauqua society. As they emerged from the dining-room, where they were served with ice cream, cake, and bonbons, each guest was presented with a small United States flag, the emblem of the Class of '99. Music was furnished by mandolins and guitar. It was a delightful and brilliant reception." This circle expects to graduate eleven '99's this year and a Current History and Bible Class are working for seals.

IOWA.—Oaklawn C. L. S. C., Des Moines, still find the study profitable.——A large, enthusiastic class at Creston are working diligently.——Two '96's are in the class at Rockford.

KANSAS.—The second annual meeting of the Seventh District Federation of Clubs was held at Kingman, November 1st and 2d. A portion of the program was devoted to the Chautauqua course, in which a symposium was given on what Chautauqua has done for women—in the home life, the social and church work, and as an inspiration to special things, as art and literature. The advantages of the English year were discussed. Twenty-seven clubs belong to the federation, and the session was exceedingly beneficial and interesting.

NEBRASKA.—The enterprising secretary of the circle at Crete sends the following report: "Nine Nebraska Cretans are making a pilgrimage over the C. L. S. C. route to the Golden Gate, where some of us expect to arrive in 1900 and others in 1901. The journey becomes more and more delightful as we study the centuries strewn along the way. Our circle meets in the homes of its mem-

bers every Friday at 2:30 p. m.—sometimes tea, sometimes not. Prayer comes first in order and importance, next roll-call and minutes. Having no regular instructor, we find it very profitable to hand the leadership around in turn to the several members, two leading at each meeting. In our circle this plan stimulates to more careful study of the subjects in hand, and affords greater pleasure to all. As we wended our way through 'Twenty Centuries of English History' and 'Europe in the Nineteenth Century' our hearts overflowed with gratitude to God for the privilege of living in the happiest time and the happiest country of all history. We are sorry to bid them good-by, but our caravan is ordered to pass 'From Chaucer to Tennyson,' and we expect to see the people of the eighteenth century live and move once more, and to enjoy many 'Walks and Talks in the Geological Field' this year. While we are all very busy people, and have little time for papers and studies, we are keeping abreast with the Chautauqua time table and hope to pass through the gate at the appointed hour."

COLORADO.—Several members of the C. L. S. C. in Walsenburg are members of 1902.

CALIFORNIA. — The fifteen members of the flourishing circle at San José meet Monday evenings and study the lesson outlined in THE CHAUTAUQUAN. The secretary writes: "Milton Day we celebrated by inviting graduate Chautauquans and friends to a reception. A speaker was engaged for the evening and fine music was rendered on the guitar, after which refreshments were served. All gained new enthusiasm for Chautauqua."

NEW MEXICO.—The Cactus C. L. S. C. is making rapid strides toward graduation.

TALK ABOUT BOOKS.

Our Navy in the War with Spain.

The achievements of our navy in the late war with Spain have been the subject of many newspaper and magazine articles, as well as books, but nowhere is their glory more succinctly and comprehensively set forth than in a volume by John R. Spears, called "Our Navy in the War with Spain."* The book opens with a summary of the events which made intervention by the United States a moral obligation. Following this is a brief description of the *Aspinwall* and *Virginius* incidents, the settlement of which caused Spain to lose all respect for this nation, a fact which, in the writer's opinion, made possible the war of 1898. Then the author gives an account of the development of the navy since 1865, with a description of its condition at the opening of hostilities, thus putting the reader in possession of facts which assist him in fully comprehending the brilliancy of the naval achievements. From this point the author naturally takes up the war proper, following the sequence of events from the destruction of the *Maine* to the close of the war. This recital, plain, straightforward, and rational, is supplemented by a chapter giving information about the battle-ships in process of construction and the effect of the war on future plans for our navy. A very pleasing feature of the volume is the large number of excellent illustrations, which include portraits of prominent naval officers, pictures of battle-ships and guns, representations of important events, diagrams, maps, and charts.

Fiction.

The title of Gilbert Parker's recent fictional work, and the scene and time of its action, lead to the impression that it is an historical novel, but the author expressly states that it has no claim to that distinction. "The Battle of the Strong"* is, rather, a tale in which the characteristics of the Jersey people are clearly portrayed. To accomplish this result the author has constructed a plot full of intrigue, treachery, and dishonesty, which necessitates at times violent action, followed by events which move along none too rapidly. All sorts of people, too, are actors in this drama. The heroine, Guida Landresse de Landresse, is a simple, kind, trustful maiden, but when she is wronged through the ambition, selfishness, and vanity of Philip d' Avranche she becomes as implacable as only a woman can whose heart has been mortally wounded. Important as these two personages are, there are others whose loyalty, sincerity, and artlessness appeal more strongly to the sympathy of the reader as he follows the course of the story from Jersey to France and back again. Though inferior to other work the author has done, it is an interesting and a well-written story.

Philip Ashe and Maurice Wynne are the two young men of Puritan ancestry whose careers Arlo Bates has depicted in "The Puritans."† At the opening of the story the young men are staying with fashionable Boston relatives because a fire has compelled them to vacate Clergy House, where for several years they had been leading an ascetic life, preparatory to taking orders. These same

*Our Navy in the War with Spain. By John R. Spears. With more than one hundred illustrations. 428 pp. $2.00. New York: Charles Scribner's Sons.

*The Battle of the Strong. By Gilbert Parker. 462 pp. —†The Puritans. By Arlo Bates. 424 pp. $1.50. New York and Boston: Houghton, Mifflin and Company.

worldly friends escorted them to spiritualistic séances, Christian Science meetings, and theosophic discussions, and introduced them into society and to beautiful women, for the purpose, it seems, of inducing them to abandon the clerical profession. It takes just thirty-seven chapters of wearisome incidents, in which persons not particularly agreeable take a prominent part, to make Ashe a Roman Catholic and Wynne an agnostic. The work abounds in introspective analyses and discussions on the celibacy of the priesthood.

In a volume entitled "The Two Magics"* are two tales very unlike in character. The first one is "The Turn of the Screw," in which the author, Henry James, again displays his skill as a delineator of psychic phenomena. In this particular story the theme is the continued influence on two children of a disreputable governess and her accomplice after their disappearance and the discovery of this influence by another governess who is keenly sensitive to psychic impulses. The intangible is here painted with a skill little short of the supernatural, and in dealing with these subtleties of the mind the author has produced a tale whose suggestiveness makes the blood bound through the veins with unusual rapidity. In the second story, which, in comparison with the first, takes on a farcical character, Mr. James has employed a clearer, less complicated syntax, and, improbable as the story is, the reader enjoys the sensation of easily comprehending the meaning the author wishes to convey.

"The Nameless Castle"† is the title of a story by Dr. Maurus Jókai, the great Hungarian novelist. It deals with the period in which the Hungarian army was engaged in a conflict against a detachment of Napoleon's forces. The opening scene in Paris gives a glimpse of Parisian society in the early years of this century and of the methods of detecting conspirators against the state. One of these conspirators escaped from Paris with a mysterious companion into a small Hungarian town, where they lived in seclusion. The plan by which their retreat was discovered and by which they were to have been captured constitutes the plot, a simple but ingenious one, and in working it out the author has introduced clever strategy and skilful military engagements. The translator, S. E. Boggs, has done a great service in giving the English reading public a smooth translation of this excellent literary work.

The title which Rudyard Kipling has chosen for a volume of short stories is "The Day's Work."‡ Among the dozen tales constituting the contents are some of the author's most delightful compositions, which in subject and treatment display the great versatility of his genius. Inanimate objects, like the locomotive in ".007" and the component parts of the steamer in "The Ship That Found Herself," are under the facile pen of Kipling no longer inactive and lifeless, but objects palpitating with life and energy. Animal nature, portrayed in "The Walking Delegate" and in stories of India, and the superstition of the people of India are subjects which he knows full well how to invest with fascinating power. But the story which most captivates the heart and which may well be placed among the classics is "The Brushwood Boy."

Religious.

A volume entitled "The New Puritanism"* contains addresses made on the occasion of the semi-centennial anniversary of the founding of Plymouth Church. Lyman Abbott, Amory H. Bradford, Charles A. Berry, George A. Gordon, Washington Gladden, and William J. Tucker are the authors of the contents of this book, and their masterly treatment of social and religious problems affords rich food for thought.

Ian Maclaren expresses many comforting and encouraging thoughts in a small book entitled "Companions of the Sorrowful Way."† This way, the way of Jesus from the Garden of Gethsemane to the tomb, "compassed all the varieties of life," and no matter in what manner sorrow comes to us we can find Jesus a sympathizer. This is the theme of the nine chapters which the author has written in his most pleasant, attractive style.

In "Selfhood and Service"‡ the writer, Mr. David Beaton, expresses a rational view of the methods by which social reform is to be brought about. The greater part of the wealth of the country, he declares, is in the hands of a small number of Christians, and the church, having within itself this wealth, has not done all that it might in the work of social redemption, but, with the idea that a Christian has no right to accumulate property he has no sympathy whatever. A regenerated personality performing the duties of Christian service is the remedy Mr. Beaton discusses in arguments clear and cogent.

The last nine chapters of St. John's Gospel con-

---

*The Two Magics. By Henry James. 393 pp. New York: The Macmillan Company.

†The Nameless Castle. By Maurus Jókai. Translated from the Hungarian, under the author's supervision, by S. E. Boggs. 338 pp. $1.25.—‡The Day's Work. By Rudyard Kipling. 431 pp. New York: Doubleday and McClure Company.

*The New Puritanism. Papers by Lyman Abbott, Amory H. Bradford, Charles A. Berry, George H. Gordon, Washington Gladden, William J. Tucker. With an introduction by Rossiter W. Raymond. 275 pp. $1.25. New York: Fords, Howard, and Hulbert.

†Companions of the Sorrowful Way. By John Watson (Ian Maclaren). 185 pp. 75 cts. New York: Dodd, Mead, and Company.

‡Selfhood and Service. By David Beaton. 220 pp. $1.00. New York and Chicago: Fleming H. Revell Company.

stitute the theme of a volume entitled "Love to the Uttermost,"* of which Rev. F. B. Meyer is the author. It is an interesting exposition, in which some of the incidents in the life of Christ hitherto considered unimportant are given a new and deeper meaning. The writer displays great originality of thought, and his interpretation of subjects pertaining to the spiritual life is inspiring and suggestive.

The introduction to "The Student's Life of Christ"† is a critical investigation of the sources upon which we rely for information concerning Christ. Then the facts of Christ's life as given in all the various sources are brought together, examined, and discussed in such a manner that when the book is finished it constitutes a very complete and systematic biography.

"Divine Immanence"‡ is a comprehensive essay on the relation of nature and religion by J. R. Illingworth, M.A. After discussing the relation of spirit to matter he shows that the chief use of matter to spirit is its religious influence, fortifying his arguments by illustrations from ancient and modern literature. From this point in his discussion the author goes on to consider the immanence of God in nature and in man, the incarnation, miracles, sacraments, and the Trinity, showing that the culmination of the evolution of the religion of nature is in the Christian revelation. It is a plain, forceful presentation of an oft-discussed subject.

To help students to appreciate the value of the Bible as literature is the object of "The Modern Reader's Bible."‖ Consequently the editor, Prof. Richard G. Moulton, has arranged the biblical text in its proper literary forms, which he states are history, story, oratory, lyric, and drama. The introductory volume is a collection of excerpts illustrating the different kinds of literature found in the Bible. The introduction and notes in each volume contain valuable information written in a clear, concise literary style. The volumes are small and substantially bound in black.

"Paul and His Friends"§ is the title of a volume containing about thirty revival sermons preached by Dr. Louis Albert Banks in the First Methodist Episcopal Church, Cleveland, Ohio. They are short, simple presentations of gospel truths based upon the life of Paul, in which the writer's originality and forceful style are strikingly exhibited. They furnish pleasant and profitable reading.

Miscellaneous.

Albert Lavignac, professor of harmony at the Conservatoire at Paris, is the author of a valuable work on Wagner's music dramas and the theater at Bayreuth.* The opening chapter describes life in the town of Bayreuth, and following this are a biographical sketch of the composer, a history of the theater, analyses of Wagner's poetical and musical compositions, and a description of the methods employed by the interpreters of Wagnerian art, with lists showing the assignment of rôles, the instructors and the conductors during the performances. The subject is an interesting one, and the author, by his simple treatment and by the condensation of a vast amount of information into a comparatively small space, has produced an extremely valuable work. The translator, Esther Singleton, has rendered the work into generally clear and smooth English, and the illustrations are pictures and diagrams appropriate to the text.

A collection of essays on subjects of special interest to women has for its title "The Unquiet Sex."† There are five of these papers and they treat of the college educated woman, women's clubs, the work of women in reforms, the evolution of the sex, and the servant question. Clearly and fairly, and occasionally with not a little humor, the author has expressed some practical, common-sense ideas which open broad fields for thought.

In the present stage of the world's progress there are but few who do not rejoice in the improved conditions for women, and the author of "Worldly Ways and Byways"‡ seems to be one of them. His volume contains forty short essays on a variety of subjects, in which he seeks opportunities to express, in a caustic way, his disapproval of what he considers the faults and foibles of women and the downward tendency of the times. It is a pity so facile a pen could not have been employed for a better purpose.

"The Book of Games"‖ comes as a veritable boon to the hostess who is in search of something unique and interesting for the diversion of her guests. Directions for playing one hundred and fifteen games are given in a clear and concise

---

*Love to the Uttermost. By F. B. Meyer, B.A. 293 pp. $1.25. New York and Chicago: Fleming H. Revell Company.

†The Student's Life of Christ. By George Holley Gilbert, Ph.D., D.D. 412 pp. $1.25.——‡Divine Immanence. By J. R. Illingworth, M.A. 270 pp. $1.50.——‖Select Masterpieces of Biblical Literature. 298 pp.—The Psalms and Lamentations. Two vols. 248 + 247 pp.—Jeremiah. 253 pp.—St. Luke and St. Paul. Two vols. 240 + 235 pp.—St. Matthew and St. Mark and the General Epistles. 329 pp.—The Gospels, Epistles and Revelation of St. John. 254 pp. Edited with an introduction and notes by Richard G. Moulton. 50 cts. each. New York: The Macmillan Company.

§Paul and His Friends. A Series of Revival Sermons. By Rev. Louis Albert Banks, D.D. 347 pp. $1.50. New York: Funk & Wagnalls Company.

*The Music Dramas of Richard Wagner and His Festival Theater in Bayreuth. By Albert Lavignac. Translated from the French by Esther Singleton. With illustrations and diagrams. 515 pp. New York: Dodd, Mead and Company.

†The Unquiet Sex. By Helen Watterson Moody. 159 pp. $1.25.——‡Worldly Ways and Byways. By Eliot Gregory. 281 pp. $1.50.——‖The Book of Games. By Mary White 191 pp. $1.00. New York: Charles Scribner's Sons.

way, and a couple of pages under the heading "Some Forfeits" give practical suggestions which an ingenious person can enlarge upon. The handsome binding makes the book as attractive as it is useful.

What the book just mentioned is to the individual hostess "Eighty Pleasant Evenings" * is to the committee having in charge the preparation of entertainments for church socials. Complete programs for eighty evenings of fun and instruction are fully described.

Three of the ten papers in a volume† by Leon H. Vincent treat of the bibliotaph, his methods, and the peculiarities of his speech and habits, a subject which, under the treatment of Mr. Vincent's skilful pen, is not without considerable interest. But the papers delighting us most are those which treat of Hardy, Stevenson, Keats, Priestly, Gautier, and others. Here the writer is at his best, giving the reader the benefit of his study and judgment of these authors in a terse, dignified literary style.

"Home Economics" ‡ is the subject of a work which ought to be in the hands of every housekeeper. Into a comparatively small space the author, Maria Parloa, has compressed a vast amount of information on the preparation and care of materials and objects constantly in use by the housekeeper, with suggestions on marketing, cooking, serving, and many other subjects upon which the skilful housekeeper needs to be well informed.

Small and inexpensive books make up the various series of the "Ladies' Home Journal Library." ‖ In these volumes are suggestions on social forms, the duties of a business girl, pleasant methods of entertaining friends, house building, cooking, and church socials and entertainments. Each of these books is by an authoritative writer, and the classes for whom they are intended can obtain from them information which will add to their happiness and success in life.

---

* Eighty Pleasant Evenings. Compiled by the Press Committee of Deems Memorial Christian Endeavor Society of Immanuel Church. 117 pp. 35 cts. Boston and Chicago: United Society of Christian Endeavor.

† The Bibliotaph and Other People. By Leon H. Vincent. 233 pp. $1.50. Boston and New York: Houghton, Mifflin and Company.

‡ Home Economics. By Maria Parloa. 378 pp. $1.50. New York: The Century Co.

‖ Home Games and Parties. By various authors, and here edited by Mrs. Hamilton Mott. With a chapter on light refreshments for evening company by Mrs. S. T. Rorer. 188 pp. ——The Business Girl in Every Phase of Her Life. By Ruth Ashmore. 177 pp.——The Well-Bred Girl in Society. By Mrs. Burton Harrison. 213 pp.——Good Cooking. By Mrs. S. T. Rorer. 245 pp.——Model Houses for Little Money. By William L. Price. With an additional chapter on doors and windows, by Frank S. Guild. 193 pp.——Church Sociables and Entertainments. Illustrated. 168 pp. 50 cts. each. Philadelphia: Curtis Publishing Company. New York: Doubleday & McClure Co.

BOOKS RECEIVED.

AMERICAN BOOK COMPANY, NEW YORK, CINCINNATI, CHICAGO.

Eutropius. Edited for School Use by J. C. Hazzard, Ph.D. 75 cts.

Guerber, H. A. The Story of the Thirteen Colonies. Eclectic School Readings. 65 cts.

Rogers, L. C., A.B. French Sight Reading. A Systematic Preparation for Sight or Rapid Reading in French. 40 cts.

Forman, S. E., Ph.D. (Johns Hopkins.) First Lessons in Civics. A Text-book for Use in Schools. 60 cts.

Willoughby, Westel Woodbury, Ph.D. The Rights and Duties of American Citizenship. $1.00.

Keller, I. Second Year in German. $1.20.

D. APPLETON AND COMPANY, NEW YORK.

Butts, First Lieut. Edmund L., Twenty-First Infantry, United States Army. Manual of Physical Drill United States Army. $1.25.

Holden, Edward S., Sc.D., LL.D. The Earth and Sky. A Primer of Astronomy for Young Readers. 28 cts.

Edridge-Green, F. W., M.D., F.R.C.S. Memory and Its Cultivation. $1.50.

Clodd, Edward. Pioneers of Evolution from Thales to Huxley. With an Intermediate Chapter on the Causes of Arrest of the Movement. $1.50.

Johnson, Henry (Muirhead Robertson). The Exploits of Miles Standish.

C. W. BARDEEN, SYRACUSE, N. Y.

Bardeen, C. W. Commissioner Hume. A Story of New York Schools. Manila, 50 cts.; cloth, $1.25.

R. K. BEECHAM, EVERETT, WASH.

Beecham, R. K. The Battle of Gettysburg: A Poem. Admiral Don Pascual de Cervera y Topete and Spain's Invincible Flying Squadron: A Song. With Other Poems and Songs.

THOMAS Y. CROWELL & COMPANY, NEW YORK AND BOSTON.

Trine, Ralph Waldo. In Tune with the Infinite, or Fulness of Peace, Power, and Plenty.

Dole, Charles F. The Coming People. $1.00.

Lindsay, Anna Robertson Brown, Ph.D. What Good Does Wishing Do? Paper, 35 cts.

FRANCES L. DUSENBERRY, M'VICKER'S THEATER BUILDING, CHICAGO.

Moore, J. Howard. Why I Am a Vegetarian. An Address Delivered before the Chicago Vegetarian Society. Paper, 25 cts.

EATON & MAINS, NEW YORK.
CURTS & JENNINGS, CINCINNATI.

Rassam, Hormuzd. Asshur and the Land of Nimrod. An Account of the Discoveries Made in the Ancient Ruins of Nineveh, Asshur, Sepharvaim, Calah, Babylon, Borsippa, Cuthah, and Van, Including a Narrative of Different Journeys in Mesopotamia, Assyria, Asia Minor, and Koordistan. $3.00.

Fradenburgh, Rev. J. N., D.D. Light From Egypt. $1.25.

Schell, Edwin A., D.D. Epworth League Bible Studies. Paper, 15 cts.

Sanford, A. B., D.D. Methodist Year Book, 1899. Paper, 10 cts.

The Epworth League Handbook for 1899. 5 cts. each.

The Berean Beginner's Lesson Book on the International Lessons for 1899. 15 cts.

The Berean Intermediate Lesson Book on the International Lessons for 1899. 15 cts.

The Berean Senior Lesson Book on the International Lessons for 1899. 15 cts.

R. F. FENNO & COMPANY, NEW YORK.

The Casino Girl in London. By Herself. Edited by Curtis Dunham.

J. FISCHER & BRO., BIBLE HOUSE, N. Y.
IGNAZ FISCHER, 229 SUMMIT ST., TOLEDO, O.

New Musical Drills and Humorous Action Songs for Boys and Girls. Arranged by Richard Hardman. Paper, $1.00.

GINN & COMPANY, BOSTON.

Gleason, Clarence W., A.M. The Gate to Vergil. 50 cts.

Frink, Henry Allyn, Ph.D. The New Century Speaker for School and College. $1.10.

Gage, Alfred Payson, Ph.D. The Elements of Physics. Revised Edition. $1.20.

Dyc, Charity. The Story Teller's Art. A Guide to the Elementary Study of Fiction. 55 cts.

Seeligmann, Karl. Altes und Neues. A German Reader for Young Beginners. 45 cts.

Hempl, George, Ph.D. The Easiest German Reading for Learners Young or Old. English Nursery Rimes in German. 45 cts.

Deutsche Gedichte for High Schools, selected and arranged by Hermann Mueller, L.M. 45 cts.

Davis, William Morris, assisted by Snyder, William Henry. Physical Geography. $1.40.

POND'S EXTRACT;

not any other kind of an extract, but

Pond's, and Only Pond's.

Relieves all Pain.

Voice Improved

Lungs Enlarged

Throat Cured

Singers, Speakers, Elocutionists, School Teachers, Clergymen, Lecturers, Readers, Talkers.

ADIRONDACK BALSAM

Breathed through our little tube (see that cut) the most powerful help to Voice Users. Five minutes each morning Trains the Voice, Enlarges the Lungs, Gives Plump Chest, Cures all Throat and Lung Troubles. Colds disappear quickly. Outfit, sixty cents. Pamphlet of Fine Breathing and Voice Exercises. Outfit has Breathing Tube, bottle of **Adirondack Balsam**, Pipette, Medicated Absorbent. Pamphlet of Exercises and Instruction. Send sixty (60) cents. Circulars sent on request.

ADIRONDACK BALSAM CO.,

121 West 42d Street, NEW YORK.

ROYAL BAKING POWDER

Absolutely Pure

Made from most highly refined grape cream of tartar.

Makes pure, delicious, wholesome food.

ROYAL BAKING POWDER CO., NEW YORK.

HEADACHE

Horsford's Acid Phosphate by its action in promoting digestion and as a nerve food, prevents and alleviates **headache** arising from a disordered stomach, or that of nervous origin.

The best remedy for **insomnia** and **dyspepsia**.

Pleasant to take.

For sale by all Druggists.

Enameline

THE MODERN

STOVE POLISH

PASTE, CAKE OR LIQUID

After using Enameline No Housekeeper will ever use any other Brand.

J.L. Prescott & Co. New York

This book should be returned to the Library on or before the last date stamped below.

A fine is incurred by retaining it beyond the specified time.

Please return promptly.

MAY 4 '59 H

3 2044 092 704 345